Approved For Use With *TRAVELLER*®

the TRAVELLERS' Digest

Adventure Number 8 $3.95

Tech Briefs: Hand Computers

Beyond 101 Robots

Shoot-Out At Shudusham

FEATURE ADVENTURE

The quarterly adventure magazine devoted to GDW's Game of the Far Future, ***Traveller***®

Digest Group Publications

The Best Team Going!

Adventure on Worlds of Exquisite Detail...With the Grand Survey/Grand Census Team!

Grand Survey
Exploring and Detailing Worlds

Learn the details of a world's size, atmosphere, hydrographics, temperature, terrain, city location, and more. Includes an extensive players' section packed with new sensor equipment. $7.

Grand Census Coming this April
Contacting and Detailing Cultures

Learn the details of a world's government, laws, technology, cultural outlook, economics, and more. Also includes a players' section packed with new landing party equipment and vehicles. $7.

At Your TRAVELLER Dealer!

Also available direct from: Digest Group Publications, 8979 Mandan Ct., Boise, ID 83709. Please include $1 per order for postage/handling. (Please include $2.50 for overseas orders).

Other **Traveller** Products...

101 Robots, An Illustrated Catalog—$7

Travellers' Digest Magazine (1 yr. sub.)—$14 ($22 overseas)

VISA/MasterCard orders accepted. Phone: (208) 362-3094.

Digest Group Publications holds a license with Game Designers' Workshop to produce officially approved products for **Traveller**.

Shoot-Out At Shudusham

FEATURE ADVENTURE

"The Shudusham Robotics Conference is meant to impress us with technological marvels, but the greatest technological marvel is still the thinking, living brain."
—Akidda Laagiir, from "Into the Core" in *The Travellers' Digest*, 1105

Credits for the Feature Adventure:
Designed by Gary L. Thomas
Helpful suggestions by Joe D. Fugate Sr.

Playtesting...
Bob Marlatt, Craig Sweigart, Nona Sweigart

The offices of the Digest are located on Deneb in the Deneb Sector of the Imperium. The Digest is available throughout the frontier sectors of Corridor, Deneb, Spinward Marches, Trojan Reach, and the Reft Sector (spinward).

The publishing date of this adventure is **060-1113**, or the 60th day of the 1113th year of the Imperium. *The Travellers' Digest* is published quarterly by Digest Group Publications and is devoted exclusively to **Traveller***.

Editor: Gary L. Thomas
Associate Editor & Art Director: Joe D. Fugate Sr.
Contributing Editors: Nancy Parker, Robert Parker
Production Manager: Patricia Fugate
Business Manager: Kristie Fields
Publisher: Digest Group Publications
Artists in this Issue:
Joe D. Fugate Sr. – pp. 7, 8, 9, 22, 23, 28, 29, 35, 38, 44, 46, 54, 55, 56, Back Cover
Rob Caswell – Front Cover, 1, 6, 15, 16, 19, 24, 28

Copyright © 1987 by Digest Group Publications. All Rights Reserved. Printed in the United States of America. No part of this magazine may be reproduced in any form or by any means without written permission from the publisher. Portions of this magazine are taken from **Traveller** materials published by Game Designers' Workshop, and are copyright © 1987 by GDW, Inc.

1 2 3 4 5 6 7 8 9 10

Address editoria l comments to:
Gary L. Thomas, Editor
The Travellers' Digest
8979 Mandan Ct.
Boise, ID 83709

The Travellers' Digest is available quarterly at an individual price of $3.95. One year subscriptions are $14.00. Foreign air mail subscriptions (outside the USA or Canada, but not to APO or FPO addresses) are $22.00 a year. Mail subscriptions (in US funds drawn on a US bank) to:
The Travellers' Digest
Digest Group Publications
8979 Mandan Ct.
Boise, ID 83709

***Traveller** is a registered trademark of Game Designers' Workshop. The Trademark is used with permission. Digest Group Publications holds a license with Game Designers' Workshop to produce officially approved **Traveller** products.

The Travellers' Digest, Adventure Number 8

Editors' Digest 4

Shoot-Out At Shudusham, Feature Adventure
- Introduction 6
- Characters 7
- The Universal Task Profile (UTP) 9
- A Minor Misunderstanding 12
- Referee's Synopsis 14
- Shudusham 15
- The Complex 17
- A Note on Language Difficulties 17
- Things to Do at the Shudusham Robotics Conference 17
- Bruiser Robot 18
- Baby Bruiser 20
- Ships Used by the Aliens 21
- NPCs 22
- The K'Kree Incident 23
- Demonstration of the Bruiser 25
- Akidda's Double 25
- Society for Free Scientists 25
- Infiltrating the Society 26
- The Awful Aftermath 26
- Hot Potato 27
- The K'kree Park 27
- A Tricky Task 30
- Cleaning Up 30
- Aybee's Repairs 31
- An Alternative Scenario 31
- The Actual Key 31
- The Long-term Effects 32

Core Subsector 34

The Gaming Digest: Brains, Not Brawn, *by Gary L. Thomas* 38

The Mystery of the Missing Text 43

Library Data of the Core Sector, *by Joe D. Fugate Sr.* 44

Traveller Tech Briefs: Hand Computers, *by Gary L. Thomas* 46

Beyond 101 Robots, *by Gary L. Thomas* 54

Editors' Digest

Big things are just over the horizon for **Traveller** fans, and we at Digest Group Publications are smack dab in the middle of all this excitement.

Big News

Next issue, we are changing to a full-size 8-1/2" x 11" format, with a full-color cover. Several other changes will occur to our format simultaneously. We believe that all of these changes are improvements, but some of them deserve to be explained.

To begin, we want to once again emphasize that we depend on you, our readers, for support. Both of us as editors personally read every letter you send to us, and we answer as many as we find time for, as many of you already know. The only way we have succeeded in producing what we feel is the finest **Traveller** magazine in print is by listening to reader feedback and giving you what you ask for. With this in mind, let's look at what our new format entails.

First and most obvious: a new size. We are changing from our minimum 52-page small format to a minimum 48-page large format, with a full-color cover.

Second, we are expanding our coverage of **Traveller**, using up some of this extra space for this purpose. We will *not* start using giant typefaces. We will *not* enlarge pictures to ridiculous proportions to take up space. We *will* give you even more Traveller material than you have been getting, at the *same* cover price. (We will explain below how this is possible.)

Third, we will start to include **Traveller:2300** in our magazine. Although a few letter-writers have literally pleaded with us not to do this, many others have asked that we expand our coverage. There are good reasons we have decided to follow this course, while weighing our readers' opinions in the matter. If you have a copy of the new game, you may have noticed certain similarities between it and our own UTP system. If so, you may have noticed our names included as "significant contributors" to the game.

Our work in bringing the game to life makes it only natural that we continue to have some influence on it. The inclusion of the new game also makes our magazine more appealing to game dealers. The more copies of our magazine that hit the shelves, the more will be bought, and the healthier we will be financially. The healthier we are, the easier it is for us to continue bringing you the finest in **Traveller**. (Remember our cover price promise?) Again, we will *not* reduce the amount of **Traveller** material in order to include **Traveller:2300** material.

Fourth, we will expand the amount of advertising in the magazine. On the one hand, this is a service to you, keeping you apprised of the latest game materials available. On the other hand, it pays for our increased size. Get the picture? Someone else will help pay for a bigger magazine if you promise to look at their pretty displays once in a while. So far, our readers have been very supportive of our advertisers. They (and we) thank you for this, and ask for your continued support.

As our magazine changes and grows, we will be particularly attentive to

your views. Please take an opportunity to tell us how you like this new format.

One new column we're sure you will enjoy is called " **Traveller** Q&A". This regular feature will answer your questions with *official* answers, each one personally approved by Marc W. Miller of Game Designers' Workshop. Send these questions along, and we'll fit as many as we can into this new column.

Since we'll have more space to fill, we'll need more work from our readers. If you write or draw, send a self-addressed stamped envelope for a copy of our guidelines. We now pay on acceptance rather than on publication, and our rates are competitive with the gaming industry.

Bigger News

(The next tidbit of news has not been made public: you are reading it here first.)

We enjoy getting fan letters, and one in particular has us excited. A certain reader likes the way we handle **Traveller**, and particularly likes our ability to tie rules together into one realistic, playable package. Normally, we could just send a thank-you note for this compliment, but in this case we have to do more.

The appreciative reader just happens to be Marc Miller himself, the original author of **Traveller**. He has asked us to help him make the 50+ volumes of available **Traveller** material more accessible. This gives us the chance to bring together more than 10 years of rules and adventures, reordering material to make it easier for you to use. But don't be misled: this goes beyond a simple repackaging—look for significant new material too!

Plans are for a series of books, each dealing with a particular topic in depth. The first of these books, for players, will be published by GDW in time for an ORIGINS release.

ORIGINS 87

ORIGINS? Is it that time of year already? Almost—mark your calendars for July 3, 4, and 5, and plan to be in Baltimore for our favorite game convention. We plan to renew friendships with those we met there two years ago, and to make new friends besides.

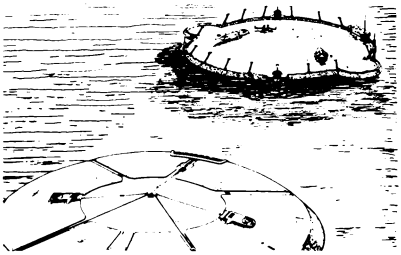
A number of awards are given to game designers at ORIGINS, and in this issue we have printed a ballot for you to cast your vote. Photocopy the ballot, fill it in, and mail it (vote three times in each category). We are eligible in two categories for 1986. *Book 8: Robots* (which we wrote for GDW), *Grand Survey*, and *101 Robots* are all eligible for Best Role-Playing Supplement.

The Travellers' Digest is eligible for Best Professional Role-Playing Magazine. There are many fine products out there in all the categories. Voting for your favorites is another way you can reward professional gamers like us. The types of products you vote for are the types of products you can expect to see more of in the future.

Grand Census

If you liked *Grand Survey,* you'll like *Grand Census,* slated for an April release. Check out the advertisement in this issue, then look for this book on your dealer's shelves next month.

Shoot-Out At Shususham



Shoot-Out At Shudusham deals with events surrounding a visit to the famous Shudusham Robotics Conference. This issue marks the eighth episode in the continuing journey of four travellers on their voyage to the Imperial Capital. After leaving their home world more than three years ago, the group is within 4 weeks of the Imperial Capital.

It is assumed that this adventure will be administered by a referee who has read through it, and who is familiar with both this adventure and the rules for **Traveller**. The basic **Traveller** rules are all that is required. Paper, pencils, six-sided dice, and square-grid graph paper are needed, and a calculator is helpful.

Optional References: Additional helpful information may be found in:

- Alien Module 3, *K'kree*
- Alien Module 7, *Hivers*
- Supplement 8, *Library Data (A-M)*
- Supplement 11, *Library Data (N-Z)*
- *The Atlas of the Imperium*

The only background information required for this adventure is contained in this issue of *The Travellers' Digest.*

Chapters: This adventure is in several chapters, most of which are material to be read only by the referee.

This introduction may be read by both the players and the referee.

The chapter "A Minor Misunderstanding" introduces the characters and the situation. This section is designed to be read to the players in order to acquaint them with the characters and their personalities.

The rest of the adventure is for the referee only; players may discover its secrets only by playing the adventure.

STANDARDS AND ASSUMPTIONS

This adventure takes place in the universe published and described by a multitude of **Traveller** products.

The Imperium is a huge human-dominated stellar empire thirty centuries in the future. It encompasses several hundred light-years of our segment of the Milky Way galaxy.

The Core Sector is a 32 by 40 parsec (1 parsec = 3.26 light-years) area at the center of the Imperim. A sector is divided into sixteen administrative areas called subsectors. Each subsector is 8 by 10 parsecs in size.

A world is commonly listed with its name followed by a slash and the name of its subsector location. For example, Shudusham/Core refers to the world *Shudusham* in the *Core* subsector.

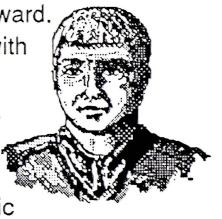
Dates: All dates herein correspond to the Imperial calendar. The starting date of this adventure is 009-1104.

Place: This adventure takes place on the world Shudusham, the host world of the famous Shudusham Robotics Conference. The Shudusham Robotics Conference is held once every ten years and draws attendees from throughout the Imperium and beyond.

CHARACTERS

This adventure is intended for the characters listed. Feel free to change any or all of the genders as desired. Additional background information for these characters can be found in other issues of *The Travellers' Digest.*

Akidda Laagiir, journalist 858AAB Age 44 6 terms Cr28,000
Born: 319-1059 on Mora/Mora
Interview-5,Streetwise-3,Grav Vehicle-1,Wheeled Vehicle-1,Admin-1,Brawling-1
Possessions: TL15 Holocrystal Recorder



Position: Current recipient of the *Travellers' Digest* Touring Award. Akidda Laagiir started at the age of eighteen as a copy boy with the *Mora World Review*; his friendly face and his ability to get people to trust him contributed to his steady career progress. Living on Mora, with its charismatic dictator, the Duchess Delphine the Matriarch, is sometimes a trying experience for any journalist, which may explain his occasionally iconoclastic actions. He is slightly prejudiced against "the system", preferring fresh ideas and fresh ways of doing things.

Akidda's most prominent skill is his interviewing ability. By his knowledge of psychology, body language, and oral communication, he has a good chance of discerning someone's feelings and drawing him out.

His admin skill was learned while moving up the ranks, but it is a skill that he would just as soon not need: he much prefers cutting through to the heart of a situation. While he is sensitive to the needs of others, he has a well developed self-preservation instinct that allows him to quickly adapt to strange locales and cultures—a skill that has saved his neck many times.

Dur Telemon, ex-scout B7A85B Age 35 3 terms Cr10,000
Born: 038-1068 on Mora/Mora
Auto Pistol-3,Survival-2,Pilot-1,Grav Veh-1, Engineer-1,Gambling-1,Brawling-1
Possessions: Auto Pistol

Dur Telemon was *born* into the Scout service. His father was in the Scout service while Dur was growing up, and both of his grandfathers served in the Scouts in their younger days. Dur enjoyed nothing more as a boy than to sit and

listen to their tales of adventure. The Fourth Frontier War broke out when Dur was a teenager—his father's service in the war was a source of pride for the entire family.

Dur's individualistic nature meshed well with his duties in the Exploration Office of the Scout Service. In his first term, a "routine" mapping expedition on Pannet/Rhylanor suddenly turned into a hostage rescue operation, and it was then that Dur happened to save Dr. Krenstein's life.

The harsh conditions Dur often encountered taught him much about staying alive and living off the land in exotic environments.

Dur has resigned from the Scouts and is travelling with his uncle, Akidda Laagiir.

Dr. Krenstein, scientist 495FCB Age 60 10 terms Cr200,000
Born: 173-1043 on Rhylanor/Rhylanor
Robotics-5,Leader-3,JOT-2,Laser Rifle-1,Grav Veh-1,Electronics-1,Mechanic-1, Medical-1
Possessions: TL15 Hand Computer, Electronic Tool Kit, Robot AB-101
Position: Graz Redniz Chair of Computational Robotics at Rhylanor Institute of Technology on Rhylanor/Rhylanor (on sabbatical leave).

Dr. Theodor Krenstein is a gifted, multi-talented scientist, with interests ranging from anthropology and archaeology to xenology and zoology, including most of the "ologies" in between. He holds advanced degrees in computer science and robotics.

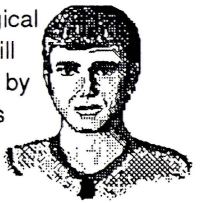
After three terms as Dean of the School of Robotic Science at the Rhylanor Institute of Technology, he was appointed to the Graz Redniz Chair of Computational Robotics, a prestigious and coveted position. He has to his credit 12 books, over 100 articles in technical and scientific journals, and holds more than 250 Imperial patents for his inventions and computer work. Despite this, he has become bored with academic life, and realizing his age, he has taken an extended sabbatical in order to make forays into other parts of the Imperium.

During a test of Scout survey robots in 1090 on Pannet/Rhylanor, members of a disgruntled anti-technist group kidnapped Dr. Krenstein and threatened to kill him if the Scout service didn't meet their demands. A young scout named Dur Telemon was part of the all-volunteer raiding team that finally freed Dr. Krenstein; in fact, Dur was the first to reach the Doctor.

In the following year, Dr. Krenstein constructed his personal servant and bodyguard, AB-101.

Aybee Wan Owen, valet FD9C7B Age 19(?) 0 terms Cr0
Constructed: 1091 on Rhylanor/Rhylanor
Medical-1, General Language-1, General Vehicle-1, Lt Laser Welder-1

Position: Personal servant and protégé of Dr. Theodor Krenstein.



AB-101, affectionately known as "Aybee", is a pseudo-biological robot designed and constructed by Dr. Krenstein. His UPP, skill levels, and other personal data are approximations, calculated by comparing human norms with Aybee's abilities. Although his programming gives him certain basic abilities, because of his lack of true artificial intelligence he can make errors in judgment; in abstract situations, this effectively lowers his true skill level.

Aybee's "weapon" is a light laser welder, built into his right arm. Dr. Krenstein has designed Aybee in such a way that his arm (ostensibly used only as a tool) can pass inspection by officials, since laser welders are not restricted by local law levels; however, voice override controls allow Dr. Krenstein to use Aybee as a weapon at short range.

Because Dr. Krenstein ordinarily conceals Aybee's true nature, Aybee was mistakenly granted knighthood in the Order of the Emperors' Guard along with the others, after certain events on Jode/Pretoria. Such an occurrence would be most humiliating to the emperor, so it has become imperative that Aybee's "true identity" not become a matter of public knowledge.

THE UNIVERSAL TASK PROFILE

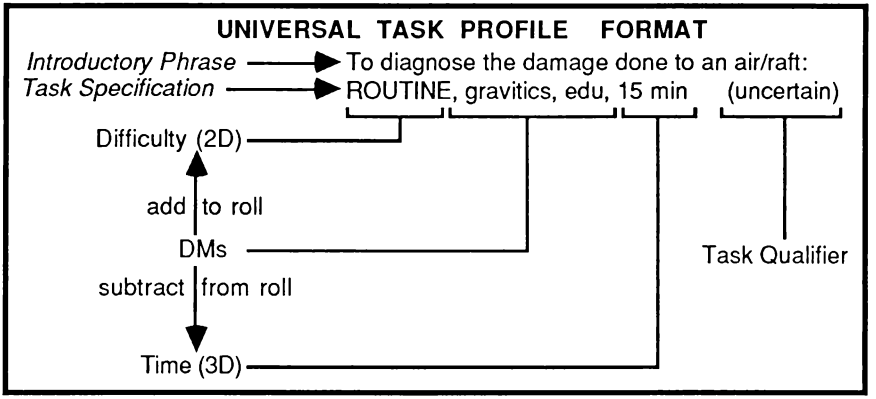
In all our adventures we use the UNIVERSAL TASK PROFILE or UTP, which provides you with all the information you need about a task to be performed. Using the UTP you can quickly roll for a task attempt and know:

- the relative difficulty of the task;
- which skills and character attributes are useful;
- if the task is hazardous;
- how long the task attempt takes;
- if you can retry the task in the event of an unsuccessful attempt;
- if a mishap occurred while attempting the task.

In addition, you can:

- rapidly determine the effects of a mishap;
- discern the extent of the damage;
- know what tasks are needed to proceed with repairs.

In short, the UTP system provides a comprehensive and playable framework for defining and attempting tasks. We encourage you to make liberal use of it. A complete summary of the UTP procedures is on the next two pages.



Difficulty: Roll 2D for success.The success roll needed for each specific difficulty level is shown in the UTP Procedure Summary, below.
—EXAMPLE: A roll of 11+ is needed to succeed at a DIFFICULT task.
DMs: Add to the difficulty roll (improves chances)
Subtract from the time roll (shortens task duration)
DMs indicate which skill(s) and which characteristic(s) are judged most crucial to task success. Generally DMs are limited to these two items. Other factors affect task difficulty, rather than becoming additional DMs.
• *crucial skills:* use character's skill level as the DM.
• *crucial characteristics:* characteristic÷5 as the DM (drop fractions;DM range is 0 to 3).
• the absolute maximum DM is ±8.
• regardless of DMs, a natural roll of 2 is a "fumble" and results in automatic failure.
—EXAMPLE: A character with gravitics-3 (skill DM of 3) and education 9 (charactistic DM of 1) = total DM of 4.
Note: If the character does not have the crucial skill (not even level-0), make the task at least one level harder, and perhaps even IMPOSSIBLE. At the ref's option, substitute a related skill at a handicapped level, or use (INT+EDU)÷5 (represents all the intellect, knowledge, and experience brought to bear).
Time: Indicates the base time period for the task; a task is assumed to take an average of 10 of these time periods. The actual time duration of the task attempt (successful or not) is:
TIME x (3D – DMs) (absolute minimum is 3 time periods)
Note: If time period is omitted from the UTP, the task is assumed to be instant.
—EXAMPLE: A 3D roll of 15, with a DM of 4 subtracted from the roll, gives a modified roll of 11. For a time period of 15 min, the duration of the task is 165 minutes (2hrs, 45min). In this example, the absolute minimum would be 45 min.

FAILED TASK ATTEMPTS

Ordinary Task: roll 2D on the Failure table (UTP Procedure Summary).
Hazardous Task: roll 3D on the Failure table.

UTP PROCEDURE SUMMARY

when attempt fails → *when mishap*

Die	*Task Attempt*	*Failure*	*Mishap*
2	automatic failure	reroll	reroll
3+	SIMPLE	retry	SUPERFICIAL (1D)
7+	ROUTINE	check determination	MINOR (2D)
11+	DIFFICULT	Mishap (2D)	MAJOR (3D)
15+	FORMIDABLE	Mishap (3D)	DESTROYED (4D)

EXPLANATION OF FAILURE TABLE RESULTS:
Retry: failed the task, but can retry with no penalty.
Check determination: failed the task, and must stay determined to retry the task without penalty. Staying determined is a special task with a UTP of:
DIFFICULT, end, int (end + int represents a character's force of will)
• if successful, can retry the task with no penalty;
• if not successful, the character has two choices:
1. retry immediately, but task difficulty increases one level
2. retry task with no increase in difficulty by waiting 10 times the duration of the failed task before retrying again.
Jack-of-all-Trades skill provides one free retry per level of skill (represents the character's resourcefulness).
Mishap(2D): failed the task, roll 2D on the Mishap table (UTP Procedure summary). After correcting the affects of the mishap, the task reverts to "check determination", should a retry be desired.
Mishap(3D): same as "Mishap 2D", except roll 3D on the Mishap table.

GENERAL DAMAGE AND REPAIR
To perform repairs: diagnose the problem. The standard diagnosis task is ROUTINE (uncertain). The referee must determine DMs and time. Repairs in the shop can be made without a successful diagnosis at an additional cost multiplier of 1D (just replace the entire assembly if you don't know what's wrong).
Once diagnosis has succeeded: establish a UTP for the repair task based on the damage level(see the table below).

GENERAL DAMAGE AND REPAIR

Damage Level	*Operate?*	*Repair Task (shop)*	*Repair Cost (shop)*
SUPERFICIAL	Yes	SIMPLE	1D% of new price
MINOR	No	ROUTINE	1D x 1D% of new price
MAJOR	No	DIFFICULT	2D x 5% of new price
DESTROYED	No	FORMIDABLE	2D x 2D x 5% of new price

For REPAIRS IN THE FIELD, increase task difficulty one level.
For LACK OF TOOLS, increase task difficulty one level.
For LACK OF SPARE PARTS, increase task difficulty one level.
All of the above difficulty increases are cumulative.
If an item with MAJOR damage was last repaired in the field, any task using that item is automatically HAZARDOUS (high risk of another breakdown) . This lasts until the item is finally repaired in the shop.

TASK QUALIFIER
Hazardous: Task has a much higher risk of mishap if it fails.
Safe: Opposite of hazardous. If a mishap occurs, it is always SUPERFICIAL.
UnskilledOK: The crucial skill is not essential. Do not increase task difficulty if the character does not have the crucial skill.
Uncertain: Immediate feedback on how successful the task attempt was is not possible. When the player rolls for the task attempt, the referee also rolls a hidden roll for the same task, which serves to modify the player's roll:

If the player's roll...	If the referee's roll...	The player gets...
FAILED	FAILED	NO TRUTH
FAILED	SUCCEEDED	SOME TRUTH
SUCCEEDED	FAILED	SOME TRUTH
SUCCEEDED	SUCCEEDED	TOTAL TRUTH

NO TRUTH: The player is totally misled as to the success of the task attempt.
SOME TRUTH: The player is given some idea of the success of the task attempt. Some valid information is given—although the player can not be sure this is the case.
TOTAL TRUTH: The player is not misled in any way as to the success of the task attempt. Totally valid information is given—although the player may not believe this is the case.

A Minor Misunderstanding

"But, Doc, it just wasn't worth the chance! What if you'd been caught?"

"Now listen, Dur, it's over now and I've explained myself to you more than once. If in your opinion I didn't exercise excessive care—"

"Excessive! You could have blown everything, Doc. I don't want the Emperor throwing me in any tower dungeon."

"I don't think they do things like that anymore, Dur, and in any case I believe you're overworrying about this little affair. The situation was really much less than you make it out to be. Don't you have some things you wanted to do?"

Dur ignored this none-too-subtle hint. "Sure, Doc, there is something I have to do. I have to save me and Kidd from your pranks. Next time you get an idea like this, could you please check it with us first? Don't take me wrong, Doc, you've got more brains than both of us put together, but sometimes you're just a little absent-minded about possible results."

Theodor Krenstein scowled at Dur for a moment, then rubbed his forehead with the tips of his fingers. He was interrupted in this by Akidda Laagiir's sudden entrance into the room.

"Krenstein, you've underestimated this place," Akidda said. "That exhibit hall you showed us yesterday is the smallest of three. The big one is more than 500 acres. I got a press kit, and it says more than 250,000 people are here at a time. Total attendance at the Shudusham Robotics Conference since the first one in 404 has been—" Akidda looked from Dur's face to the doctor's. "Say, I didn't walk in at a bad time, did I? If you guys were talking, I can come back later."

Dur rolled his eyes. "No, Kidd, nothing important. Doc's just trying to get us all arrested for embarrassing the nobility."

"Embarrassing the nobility? Is that a crime here? You're not making sense, Dur."

Krenstein spoke again. "Dur isn't happy with the way I read my paper at the session this morning."

"Not happy? Not happy? Why shouldn't I be happy? Just because Doc paraded Aybee in front of the whole crowd, you think I should be upset?" Dur rolled his eyes again.

"Dur, I didn't mean to do anything wrong, and I've already explained it to you. I've worked on Aybee for 20 years, and Shudusham is the natural showcase for his talents. If you can't discuss it peaceably, then I have better things to do with my time. If you two will excuse me?" Krenstein motioned toward the door.

Neither Dur nor Akidda made an effort to leave. "I still don't know what's going on, Krenstein," Akidda said. "Dur, you keep quiet. Doctor, if you'd mind explaining what happened for me, please..."

"OK, Akidda." The doctor looked at Dur for a moment before continuing, to make sure he wouldn't be interrupted. "This morning I was scheduled to read a paper on new achievements in pseudo-biological robotics design."

"Sure, you mentioned it to us yesterday. So what happened?"

"Nothing, really. I just—"

"Nothing! You call that nothing?"

"Hold on, Dur, I want to hear it from the doctor."

"Thanks, Akidda. I simply told them that significant advances had been made since the Telku model was presented here 20 years ago. I said that we at RIT

had designed one robot that could consistently fool humans over long periods of time, and that we had even managed to travel with this robot on interstellar trips to several worlds without its being detected. But I didn't give them any more details than that. These are more general, non-technical discussion groups."

"That doesn't sound so bad, Dur," Akidda said. "I don't see a problem."

"There's more, Kidd. Finish it for him, Doc. Let him at least know the reason why the police are coming to haul him off."

Krenstein continued. "There was a question and answer session afterwards, and in the ensuing discussion, my esteemed colleagues agreed among themselves that I must be mistaken, and that no robot would be able to fool any of them for even a moment."

"So? What's the matter with that, Dur?"

"Go on, Doc. Tell him. All of it."

"Akidda, I guessed they might come to this conclusion, and I thought it would be interesting to test their judgments directly. So I had Aybee pass through the group distributing some minor technical papers. That's all."

Akidda whistled softly and looked at Dur. "I see your point, Dur."

"I'm glad you agree with me, Kidd. This could turn out to be a real disaster."

"Krenstein, you realize that our next stop is Capital?" Akidda asked.

"Yes."

"And you remember that Strephon is going to officially knight us there?"

"Yes."

"And you know how upset he would be to find out that he had knighted a robot?"

"Yes."

"Then maybe it would be better for all of us if you didn't flaunt Aybee in public while we're among so many robotics experts. Is that reasonable, Doctor?"

"I guess you're right, Akidda. But if you had seen it. A whole room full of scientists, saying that they would never be fooled by a robot while Aybee was handing them copies of my remarks. It was immensely satisfying." Krenstein shrugged a little and smiled.

Dur opened the door and stepped out into the hallway. "If that was an apology, Doc, I'll accept it. Sorry if I came on too strong. I'll talk to you two later."

Krenstein still looked embarrassed after Dur's departure. "I didn't mean to do anything wrong, Akidda. I even used a false name for Aybee, so even if they caught on they wouldn't realize he was a knight. I hope you'll forgive me."

"No problem. But I do have a question. Did Aybee holorecord your session?"

"Yes, why do you ask?"

"I'd like a copy later. This could make a great story in 10 or 15 years. Just don't tell Dur, or he'll start stewing again." Akidda smiled. "Say, where is the source of our worries, anyway?"

"Aybee? I had another lecture scheduled for this afternoon, but I was feeling a little tired so I sent him to make it for me."

"Krenstein!" Akidda looked suddenly ashen.

"Just a joke, Akidda. He's in his room."

Akidda shook his head at the doctor's humor, and headed for his own quarters.

"Those two have a point," Krenstein said to himself after Akidda had closed the door behind him. "I better look up where that lecture is, so I can go get Aybee."

Referee's Synopsis

"A living thing either grows or swells." — Hiver proverb

The Hiver race operates under different cultural guidelines than do human races outside the Federation. For example, the Hivers place a strong importance on consensus: the decision of the group should be followed, rather than the whims of any single individual. In rare circumstances, however, this impetus is outweighed by the desire to *manipulate* others.

Manipulators, always acting alone, coordinate events in such a way that wide-ranging effects are achieved by seemingly minor happenings. While an expert manipulator can change the course of history at a single stroke, others may need to work for years to bring about their ends. Adventure 8 revolves around one such manipulation.

Epinon, a Hiver manipulator attending the Shudusham Robotics Conference, is concerned that the Hiver race is spreading too fast for its embassies to keep pace with its growth. He has brought a Hiver Bruiser, a powerful warbot, to the conference for display. During the course of the conference, he sees to it that a radical group on Shudusham steals the robot and wreaks havoc with it. He also arranges that the K'kree attending the conference later steal the robot from them and receive the bulk of the blame for the theft.

If Epinon's plans are successful, the friendly relationship between the Hiver Federation and the Imperium will be strained, and over the long term the "swelling" of the Federation will be reduced to healthier proportions. The four player characters are accidental intruders at this manipulation.

Shudusham

Shudusham (Core 2214 E849A55-A) is 94% water, with only a few small land masses peeking above the ocean's surface. The inhabitants, about 12 billion people, live in 50,000 undersea complexes, each independent for air, water, and energy life support. Trade between these complexes consists mostly of food and manufactured goods.

Raw materials can be gathered plentifully from the ocean's floor. Besides these ores, the ocean also supplies a variety of plant and animal life for food, medicine, and fibers.

During the First Imperium, Shudusham became home to about 200 million Vilani colonists, who settled at first on the surface. These early miners soon built large undersea complexes, both for the better proximity to the ocean's resources and because the artificial environment was more livable than that above the ocean. The tech level rose to A, and instellar trade was commonplace.

During the Long Night, Shudusham lost contact with other worlds, and in fact some of the undersea complexes lost contact with other arcologies. More than 1,000 years later, when the Sylean Federation was established, it was found that linguistic drift had given different sea cities mutually unintelligible

languages. Some had died out entirely, but those with the best technology survived.

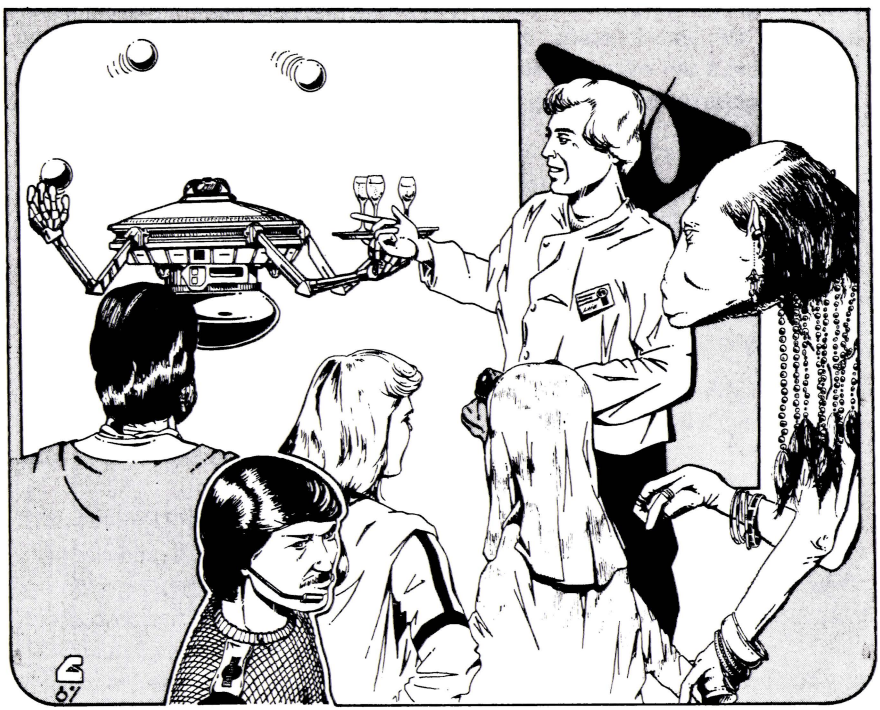
Shudusham's rich mineral ores formed the backbone of the new Sylean Federation's military and industrial power.

In -112, Shudusham's place in history was forever established by a tragic event. In that year, a terrorist group rigged a courier robot to self-destruct aboard a Sylean battleship. The vessel, *Empire's Banner,* was on a goodwill mission in orbit around Fornol (Core 1715) when the blast from the explosion killed Fornol's premier and a number of Sylean dignitaries aboard the vessel. Civil war within the Sylean Federation almost erupted from this event.

This disaster prompted twelve worlds of the Sylean Federation to meet on the neutral world of Shudusham to draft an agreement dealing with the issue of weaponry carried by robots. After much deliberation, all twelve worlds finally signed the completed Shudusham Concords in -110. A hardcopy is on display in the Museum of Sylean History on Capital.

The Concords have no legal force today, but they have served as a model for many high-tech worlds' documents governing the manufacture and use of robots.

More than 500 years later, in 404, a group of roboticists met at Shudusham to share their latest technological breakthroughs. Shudusham was chosen as the site because of its historical significance and central location. The conference

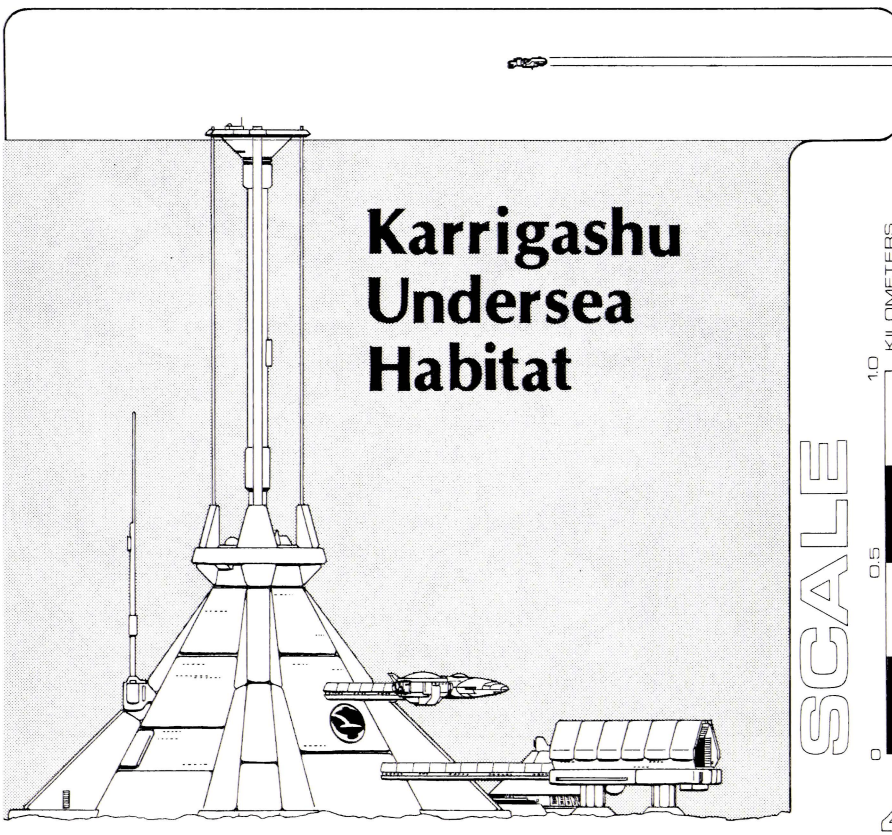


was a success; so much so, in fact, that the Shudusham Robotics Conference has continued to meet every ten years ever since. Roboticists, manufacturers, heavy robot users, journalists, and other interested parties are drawn from all over explored space to attend a portion of the one-year conference.

Ironically, Shudusham itself supports no robots, as the world's tech level is too low. This seeming paradox does not interfere with the scientific value of the conference, which grows ever more popular. During the year of the conference, Shudusham's negligible starport facilities are temporarily upgraded to support the ships of the visiting guests. In the intervening nine years between each conference, the planet does not conduct enough interstellar trade to support complete starport facilities, although a nearby gas giant does supply refined fuel. Scooping from Shudusham's oceans is a felony, as it is too easy to collide with one of the undersea arcologies.

Shudusham's government is a feudal technocracy which claims that "total self-sufficiency is possible only under technocracy". They prove this claim by imposing an import duty of 250% on interstellar trade.

The technocratic government has made some efforts in the past to encourage tourism, but these efforts have been largely unsuccessful because of the atmosphere and crowded conditions. The best they manage is the grand Shudusham Robotics Conference, held every 10 years.



The Complex

Eneri Karrigashu was the Naasirka designer responsible for the original Rashush model robot, and the Karrigashu Undersea Habitat, named for him, is host to the conference every ten years. The complex supports a population of about 300,000 people. The conference has a year-long attendance of about 400,000 from all parts of explored space, and about 250,000 of these attendees are present at any given time. The remaining space within the complex is taken up by support personnel.

Since the Karrigashu facility is used only for the robotics conference, it has grown to include many special features. An excellent robotics museum is very popular with attendees, as is the robotics library and laboratory. Certain areas of the complex are set aside for K'kree, Hiver, Vargr, and Aslan visitors.

A Note on Language Difficulties

Since a variety of races attend this conference, the linguistic variety can be overwhelming. Since Hivers build the most advanced robots (after the Imperium), assume that Dr. Krenstein has recently given Aybee some knowledge of their language, to facilitate conversations with these robot builders.

Aybee's knowledge of Hiver is not extensive, and he is operating under the disadvantage of not having the proper appendages to use their gesture language. Aybee can understand simple Hiver by watching it, and he can read and write simple Hiver sentences. He can not "speak" Hiver, nor otherwise express ideas other than in written form. Simple ideas are not a problem, but when Aybee wants to understand a complex thought, use the following UTP:

To understand complex Hiver statements:

DIFFICULT, general language, int

REFEREE: Strike a balance as to how often you roll for this task. If you roll too often (say once for every sentence), you may wear yourself out, but if you roll too seldom, you may cheat the players by declaring entire conversations as unintelligible.

There are certain episodes in this adventure in which Aybee must translate Hiver for the rest of the group; it is convenient to other episodes if this is done at least once in public.

Things to Do at the Shudusham Robotics Conference

Shudusham is large enough to keep the characters busy sightseeing. Besides the obvious tourist attractions of the undersea habitats, the planet's mining operations, and its undersea flora and fauna, there are the sights and sounds of the Shudusham Robotics Conference and its attendees.

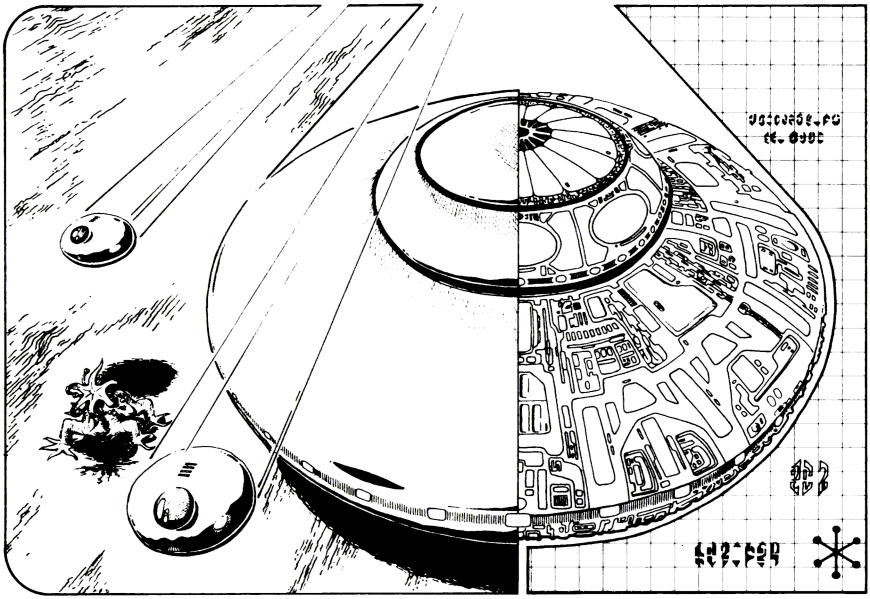
The main exhibit floor contains more than 500 acres of robots, put on display by

their manufacturers or inventors. All of the major commercial enterprises are represented here, as are the larger university research departments. Characters can spend as much time as desired visiting these booths. Use the new robot descriptions in this issue for this, as well as other robot descriptions from *101 Robots, Book8: Robots,* or other **Traveller** books.

One booth in particular is attracting a lot of attention. A complete description of its robots follows, expanded from *101 Robots.*

BRUISER ROBOT (Hiver)

D48xD-NL-PY52L-VFCQ Cr5,067,200 9,100kg
Fuel=1722.6 Duration=71.8 TL=15
1260/3150(combat armor, reflec)
6 V lt tentacles, 6 lt tentacles, 6 med tentacles, 6 hvy tentacles (all retractable)
Head (40%)
6 Eyes (+6 tele, +6 lt inten, +6 pass IR, +6 act IR)
3 Ears (+3 extra sen), voder, 1 olfactory sensor (+1 extra sen),
touch sensors (+extra sen), 2 magnetic, 2 radiation, 2 mass,
2 neutrino sensors
6 Spotlights (visual spectrum)
2 Power interfaces, 2 brain interfaces, 2 program interfaces
Master unit, slave unit
2 Radios (continental range)
Extensive counter ECM
4 TL15 holo recorders (3D)
2 Lt laser welders, 2 laser welders
3 Medical instrument, 3 mechanical, 3 electronic tool pkgs
3 Metalwork, 3 carpentry tool pkgs
Obscuration device
2 Odor emitters
4 Holodisplays (TL15)
6 Laser rifles, 2 FGMP-15s, 6 RAM auto grenade launchers,
6 Gauss rifles
Electronic circuit protection
Pilot-4, Navigator-4, Medical-4, Grav Vehicle-4, Gunnery-4,
Electronic-4, Mechanical-4, Engineering-4, Forward Obs-4,
Demolition-4, Extra Language-4, Tactics-4, Recon-4,
Interrogation-4, General Language-4, Laser Rifle-4,
FGMP-4, Grenade Launcher-4, Gauss Rifle-4, Security-4,
Survey-4, Fire Fighting/Rescue-4, Gravitics-4,
Communications-4, Ship Tactics-4, Fleet Tactics-4
Emotion Simulation



Fact 1: The Hiver race disdains personal violence.

Fact 2: The Hiver race is skilled in building robots.

Result: Hiver warbots are constructed in such a way as to be able to work independently in any military action. The "Bruiser" is an excellent example.

If you paid more than Cr5,000,000 for a robot, you would expect it to be fully equipped, and if you purchased a Hiver Bruiser, you would not be disappointed. The robot described here is a complete model, with all peripherals and programs listed. Most Bruisers have only a partial configuration, depending upon their expected use.

All by itself, a Bruiser is a formidable opponent. Its sensory array is extensive, including most of the sensors typically found on a smaller IISS survey vessel. Its weapons can include laser rifles, FGMP-15s, RAM auto grenade launchers, and Gauss rifles, and its software gives it skill level 4 in each weapon. Its grav modules give it a cruising speed of 450 kph. Combat armor polished to reflec and extensive counter ECM provide for its defense. Even if a hit is taken, most components have backup systems.

The Bruiser's brain is astonishing, with an intelligence of 12 and an education far beyond human or Hiver norms. With its knowledge and its specialized appendages, it can repair almost anything. When it captures prisoners, it can interrogate them. And its fusion reactor and power interfaces are designed to enable it to provide energy for a small city after its capture.

Yes, the Bruiser is a formidable opponent all by itself. But the Hivers seldom deploy them individually.

One common deployment method, used more frequently in the past, involved carrying a number of Bruisers along on a starship. The ship would jump into a

system, and the Hivers could send down the Bruisers, coordinating activities on the surface from the comfort (and safety) of space.

Two disadvantages presented themselves from this system. First, it was expensive to carry along a contingent of Hivers, and more importantly, space was not always a safe place to be, if the space happened to be in a war zone. This led to the use of jump carriers holding only Bruisers. Costs were minimized by this approach.

Ships carrying Bruisers did not need life support systems. The Bruisers could supply computers and maneuver capability. All that the ship needed was a jump drive and an L-Hy tank. The tank was jettisoned just before jump, and the Bruisers would detach from the ship upon entry into the system. Sometimes the jump ships are outfitted with hard points and ship-to-ship weapons. The Bruisers have the skill to operate these quite effectively.

If return trips were necessary, the Bruisers could acquisition an L-Hyd tank if the target had such technology. The Bruisers could also wait for another ship, using the head start to secure the area before a ship with Hivers could arrive to take over.

Two other items are of particular interest concerning the Bruisers. Odor emitters are installed in Hiver warbots mostly for show. Although there are no present hostilities with the K'kree race, they know that Hiver warbots have odor emitters, and their potential for use annoys them.

The other note about the Bruisers is of interest to Imperial citizens. All Hiver warbots (particularly the Bruiser) are illegal in Imperial space. Importing a Bruiser is a high justice crime.

BABY BRUISER ROBOT (Hiver)
330xF-02-9B002-CF31 Cr63,200 50kg
Fuel=14.7 Duration=6.1 TL=15 Thrust=100kg
10/25 (mesh)
2 Lt arms (retractable)
Basic sensor pkg, voder
Spotlight (visual spectrum)
Slave unit
Radio (regional range)
Counter ECM
Odor emitter
Gauss rifle
Gauss Rifle-2, Grav Vehicle-1

As formidable as the Buiser is, it can't do everything, and its massive size does make it an appealing target to enemy forces. Both of these problems can be solved by taking advantage of this size in an unusual way.

The "Baby Bruiser" is a small warbot capable of burst speeds up to 1200 kph. Outfitted with a Gauss rifle, it is an adequate shot, and its size and speed make it a difficult target to hit. It is otherwise typical of many small warbots, with a minimal brain for locomotion and weaponry software.

But in action, the Baby Bruiser is as intelligent as any robot opponent, and often as intelligent as its sentient opponents, thanks to a little help from above.

A Bruiser (typically in orbit) uses its master unit to communicate via radio to the Baby Bruiser's slave unit.

The Baby Bruisers can draw fire from the larger unit, and can also be used to investigate smaller locations where a full-sized Bruiser could not travel.

What's more, the Baby Bruisers can be deployed on a jump ship along with the Bruisers and not require any more space. Nowadays, Bruisers are designed so that up to six Baby Bruisers fit up inside the Bruiser's chassis. In this configuration, the Bruiser does not have as much fuel space, but operating duration is still nearly two standard months.

Ships Used by the Aliens

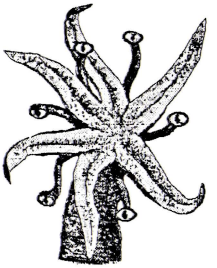
Hiver Explorer (type HX): Using a 200-ton hull, the Hiver Exporer is a multi-function ship intended for economical individual transport inside the Federation, or exploration beyond its borders. It mounts jump drive-C, maneuver drive-C, and power plant-C, giving performance of jump-3 and 3G acceleration. Fuel tankage of 90 tons supports the power plant and one jump-3. Adjacent to the bridge is a computer model/3. There are ten staterooms and no low berths. The ship has one hardpoint and one ton allocated to fire control, but mounts no turrets or weaponry. There is one ship's vehicle: a GCarrier. Cargo capacity is 2 tons. The hull is streamlined.

The Hiver Explorer requires a crew of five: pilot, navigator, two engineers, and medic. The ship can carry five passengers (up to 15 passengers when passengers and crew go double occupancy). Passengers are generally scientists and other Federation Development Agency personnel engaged in survey work. The ship is valued at MCr113.1 and takes 12 months to build.

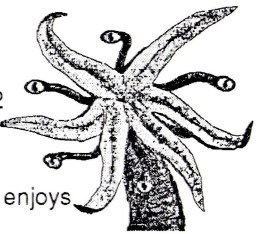
K'kree Xeekr'kir! (Merchant): Using a 6,000-ton hull, the K'kree merchant is typical of most commercial starships in the Two Thousand Worlds, and is frequently encountered as a vessel operated by a merchant family—it is a standard mustering-out benefit for some K'kree merchants. It has jump drive-2, power plant-2, and maneuver drive-1, giving a performance of jump-2 and 1G acceleration. Fuel tankage of 1320 tons supports the power plant and allows one jump-2. Adjacent to the bridge is a computer model/2. Accommodations for up to 80 individuals are available. There are 12 hardpoints and 24 tons set aside for fire control; no weapons are mounted. There are no ship's vehicles. Cargo capacity varies with crew size; 34 tons are always available, plus 48 tons per person not carried on board. The ship is streamlined.

The merchant requires a crew of six: pilot, four engineers, and medic; retinues of these individuals can provide needed technicians, gunners, servant/stewards, etc. A total of 74 family members or passengers can be carried. The ship costs MCr 2322.18 (including 10% discount for standard designs) and takes 33 months to build.

NPCs



Epinon (Hiver Scientist) Storyteller-3, manipulator
137C86 Age 51 9 terms
Manipulate-4, Medical-3, Carousing-3, Laser Carbine-3, Translate-2, Robotics-2, Leader-1
Epinon is in charge of the Hiver delegation which brought the Bruiser robot to the Shudusham Robotics Conference. He spends the greater part of the day in the Six Eyes Nest booth, where the robot is on display, answering questions and explaining the robot's importance to Hiver military strategy.



Boethos (Hiver Assistant) Explorer-3
9665D5 Age 36 5 terms
Dagger-5, Engineering-2, Helicopter-2, Ship's Boat-2
Boethos is Epinon's assistant. He knows nothing whatever of the manipulation. His dagger skill is quite unusual for a Hiver, and should not imply that Boethos enjoys personal combat more than others of his kind.

Takakruutri (K'kree Well-born Scientist)
C5B6C8 Age 62 6 terms
Robotics-6, Electronic-3, J-o-T-2, Medical-2, Enclosure-2, Admin-1, Leader-1
Realize that Takakruutri's high skill in robotics is a tech level 13 skill. He is a top scientist among the K'kree, but in the Imperium his skills are far behind Krenstein's and other current researchers.

Xtor'p!reer (K'kree Servant Ceremonial Bodyguard)
FBB76A Age 50 4 terms
Enclosure-3, J-o-T-2, Electronics-2, Fwd Obsv-2, Pike-1, Mechanical-1, Gunnery-1
Xtor'p!reer is Takakruutri's bodyguard, and will always attend him with his pike at the ready. Although the weapon is mostly ceremonial in nature, Xtor'p!reer will not hesitate to use it if necessary.

Neal Woodgate (other)
C97876 Age 31 3 terms
Electronic-2, Forgery-2, Gambling-1, Streetwise-1
Neal Woodgate is a cell leader for the Society for Free Scientists. He is responsible for the theft of the Hiver Bruiser robot.

Russ Weyer (other)
88978A Age 22 1 term
Streetwise-2
Russ Weyer is a member of the Society for Free Scientists.

The K'kree Incident

The Hiver Six Eyes Nest booth contains a Bruiser robot, set up on heavy pylons so that it rests several feet above the floor. Around it are three Baby Bruisers, floating by the power of their anti-grav modules. The Bruiser's control module also sits in the booth, with its double-ball Hiver controls. Several Hivers are always here, doing their best to answer questions for visitors.

One of these Hivers is Epinon. He is using a Hiver translator robot, contoured in a vaguely female human form. It can translate Epinon's gestures into spoken Galanglic for the audience. When someone asks a question, the robot translates it into written Hiver and this translation is transmitted to Epinon's neck screen, where he can easily read it.

Epinon's robot also has a radio link to the Hiver's ship orbiting above the world. Its computer keeps track of a variety of things the Hiver considers important. For example, a current list of attendees is available, so that when Epinon greets a guest, the robot can inform Epinon of the guest's position by reading their name tag. (When an attendee registers, he puts down his affiliation and other data; this is then made available to other attendees. Remember that the Shudusham Robotics Conference is set up specifically to foster the spread of robotics knowledge; this is made easier by letting attendees know who else is visiting at the time.)

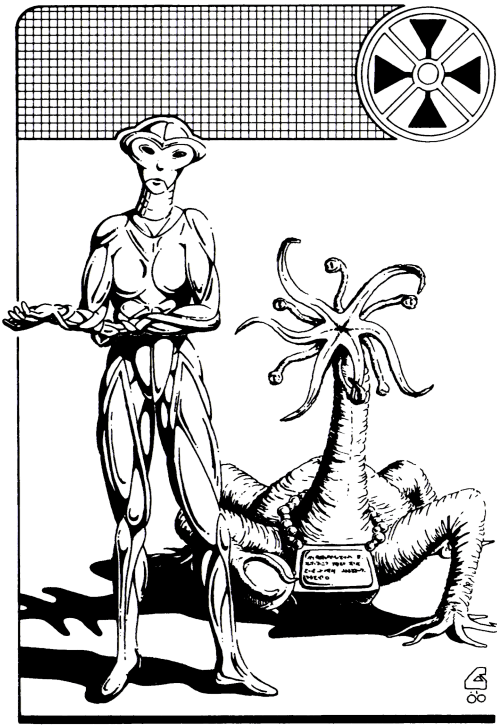
When the party approaches the booth, they can see a crowd gathered about, watching with interest some unusual goings-on. Even from a distance, two K'kree are visible at the booth, their heads poking up above the level of the crowd. One of them carries a large pike, and occasionally swings it threateningly at people who crowd too close. (Most attendees are used to this, and give any K'kree on the floor a wide berth.)

Epinon's translator robot is spouting K'kree in a loud voice, and the K'kree and his bodyguard are shouting back. The din is terrible.

Aybee does not understand any K'kree, but when Epinon gestures to his robot to speak to the K'kree, Aybee can pick up most of that side of the conversation.If Aybee gets close enough, he will also be able to see the written Hiver translation of the K'kree response on Epinon's neck screen, and will thus be able to "listen in" on both parts of the conversation.

Apparently, Epinon accuses the K'kree of having stolen a small translator unit from his display. The K'kree denies this accusation, and refuses to open his shoulder bag to prove his innocence. Meanwhile, the Hiver and K'kree trade insults, accusations, and counter-accusations.

A Shudusham security official soon arrives, with his own hand-held translator unit and a K'kree module. (Fortunately, Epinon's own robot can translate the Hiver side of the dispute for him.) After a short conversation apprises him of the situation, he very politely asks the K'kree to open his bag. The guard's liaison-4 skill pays off, together with his explanation that the K'kree's innocence would embarrass the Hiver.



When the K'kree looks into his pouch, he is chagrined to find that it does indeed contain the missing translator unit. He hands it over to the security guard, but maintains that he did not steal it. The Hiver at this point, through his translator robot, says to the guard: "Please let the K'kree keep the translator unit. After all, K'kree are used to taking things that belong to Hivers."

The K'kree at first accepts the unit, but as soon as he hears the translation of Epinon's insult, he drops the translator unit to the floor and smashes it to bits with a single blow of his hoof. He and his bodyguard then stomp off.

Epinon himself used one of his extra hands to slip the translator into the K'kree's bag when he was looking at something else in the booth. The manipulator has now succeeded in creating a known animosity between the Hivers and the K'kree at the conference.

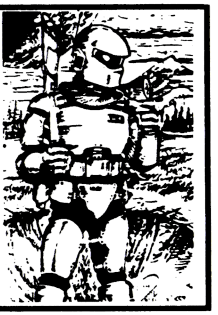
A MONTHLY FANZINE FOR *Traveller*™

- $1.00 - Sample Issue
- $6.00 - 6 issue Subscription

Make checks payable to:
Elmer Hinton, Editor

The Imperium Staple

20 Almont St., Nashua, NH 03060



Demonstration of the Bruiser

Once the Hiver-K'kree spat is ended, Epinon is more than happy to talk about his warbot. The Bruiser, Epinon explains, is the only legal model of its kind within the Imperium. Importing a Bruiser into Imperial space is a high justice crime, but special permits were obtained for this unit, because its weaponry is not functional.

A holographic "movie" shows the Bruiser in action against a variety of enemies. This impressive display clearly shows the value of this military appliance. The Bruiser's power is formidable, attacking targets while defending itself against missiles and counterfire.

The Bruiser itself has several panels removed for the display, and the insides of the robot bristle with high technology, much of which is familiar to Dr. Krenstein.

Epinon, informed of Krenstein's importance by its translator robot, is curious to talk with him more about robots and things in general.

Akidda's Double

While looking at various exhibits, Akidda is passed by a security guard, who presses a folded piece of paper into his hand and then hurries away. The guard is lost in the crowd, and it is impossible for Akidda to follow him. In fact, it is unsure whether the guard actually got a good look at Akidda, as he passed him from the back and did not turn his head, so Akidda did not see his face.

The piece of paper reads, "We take the robot tonight. Meet as planned." Akidda should notice about this time that a gentleman standing near him, in the next booth over, is simlarly dressed and has the same hairstyle. From the back, it would be hard to tell them apart. Presumably the note was intended for the other man rather than for Akidda.

Russ Weyer is this man's name, and he is part of a group that is not quite satisfied with conditions on Shudusham.

The Society for Free Scientists

Shudusham's government is a technocracy, a "government by specific individuals for those who agree to be ruled; relationships are based on the performance of technical activities which are mutually beneficial." In Shudusham's case, these "technical activities" are inventions and ideas which can be used to increase the standard of living on the world.

Shudusham, with its watery surface and thin,tainted atmosphere, is heavily dependent on advanced technology, so it is natural that technicians should be accorded a higher status in society. All patents are owned and controlled by the government; when someone invents something new, he registers it with the department of commerce, which issues a monetary award according to its rating of the new device or technique.

A few malcontents are unhappy with this system. They believe that the fruits

of someone's mind should belong to that person, to do with as he wills. If that person reaps some material benefit from his invention, he deserves it. The free market should determine the worth to society, rather that some Shudusham bureaucrat.

The Society for Free Scientists is a small underground organization which first came to the attention of officials about eight months ago. For the most part, its secret activities have been peaceful, although many have disrupted conditions on the world, and a few have resulted in violence. In one instance, Free Scientists sabotaged an underwater habitat's power facilities, and 80,000 residents had to be evacuated before order could be restored.

The Free Scientists are organized into cells, so each member knows only a few other members. The leader of the group is a mysterious woman, who appears in flatscreen messages wearing a yellow hood over her head. Her identity is unknown to members of the Society as well as to the authorities.

In fact, the leader of the Society for Free Scientists is the Hiver, Epinon. The "woman" in the yellow hood is his translator robot. He uses it to create pre-recorded messages for the group. He set up the Society as a front so that he could arrange the theft of his own robot. Manipulators are incredibly patient, and Epinon is willing to take his time to achieve his ends.

Infiltrating the Society

It is possible to tail Russ Meyer, but the characters will not be able to find out more than they can guess about the mysterious note. Your players may infer, as ours did, that Aybee is about to be kidnapped. This red herring can be a lot of fun if you can encourage it with a straight face.

Security at the exhibit is tight. Characters will not be allowed into the area after regular hours. Meanwhile, the Bruiser is hauled away, lock, stock, and barrel, by a gang of insiders who pretend to be moving some other robot around. The theft is obvious the next morning, but goes entirely undetected during the night, since many large crates and packages are typically moved by conference personnel. The evidence seems to indicate that the Bruiser was simply loaded into its own grav crate and carted off. Forged papers were used to "authorize" the removal of the crate.

The Awful Aftermath

News accounts report the unfortunate disappearance of the Bruiser, but relieve citizens' anxieties by reporting that the robot was only a mockup, with no working parts. Dr. Krenstein's perusal of the robot while it was on display should dispel any belief he has in that notion: the robot he saw could probably be made operational with little difficulty.

The next part of the adventure requires a little bit of work for the referee to make sure that all the players enjoy it as much as possible: the idea here is to force all four characters to the location of the Bruiser. If some characters try to infiltrate the Society for Free Scientists, they can help you out in this regard. Just lead them to the robot, but then hold them at gunpoint to prevent their getting away.

Hot Potato

The Bruiser could be a dangerous weapon, if it fell into the wrong hands. In this case, it has fallen into K'kree hands. Somehow or other, the K'kree have stolen the Bruiser from the Free Scientists, and naturally they plan to use it to exact some revenge from the Hivers who so mistreated them earlier.

The Free Scientists, however, have figured out where the Bruiser has been taken: the K'kree enclave in the habitat. If some characters have infiltrated the Society, they can be made privy to this information.

Krenstein and Aybee can be kidnapped at gunpoint, as long as the guns are dangerous enough to ensure that this goes smoothly. In our playtesting, we used two men in combat armor with imported PGMP-12s. The threat of this advanced weaponry, together with Aybee's powerlessness against combat armor, brought the two characters along quietly.

The Bruiser control panel is in Hiver, and these petty revolutionaries noticed that Aybee knows Hiver, and since Krenstein is such a prominent roboticist (they looked him up in the attendee's registry), they thought they could "enlist" his help, at gunpoint if necessary. If the other characters are roaming freely about, just wait until the entire group is together before they are kidnapped.

The Scientists need Dr. Krenstein and his assistant because they fear they will be unable to control the Bruiser by themselves. The story they tell, once they reach their secret hideout, is that after they stole the Bruiser, they were knocked out by some odorless, colorless gas, and when they woke up, the Bruiser and its control box were missing. The thieves had started up only *one* of its four power plants, but the robot started up the other three by itself. It raised itself up into the air using its grav modules, and refused to come down.

They sent one person up in a grav belt to try to get a closer look, and he was shot down with laser fire. Shortly thereafter, they were rendered unconscious, and when they woke up, at first they thought that the Bruiser had knocked them out and taken off by itself.

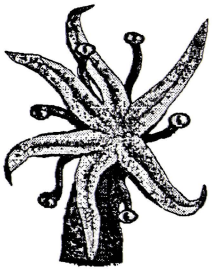
They shortly noticed evidence, however, that pointed to the K'kree. The Scientists have captured Dr. Krenstein because they believe they will need his help to regain control over the robot once they have dealt with the K'kree. If other characters have infiltrated the Society, they should be part of this rescue action. This may require some fancy footwork on your part, so that the characters do not go straight to the authorities on Shudusham.

The K'kree Park

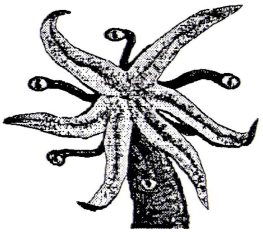
The special area set aside for the K'kree looks like a large open park, with running streams, grasses growing, as well as many trees and bushes. The park has its own independent lighting system, synchronized with the day/night cycle of the K'kree homeworld. The environmental system is also separate, so as not to offend sensitive K'kree noses with the foul stench of humans and other G'naak meateaters. One way of dealing with the K'kree, in fact, would be to infiltrate their environmental unit with knockout gas: what's good for the goose is good for the gander.

If you and your players enjoy a good shootout, however, forbid that option.

...continued on page 30—



Epinon



Boethos

Takakruutri

Neal Woodgate

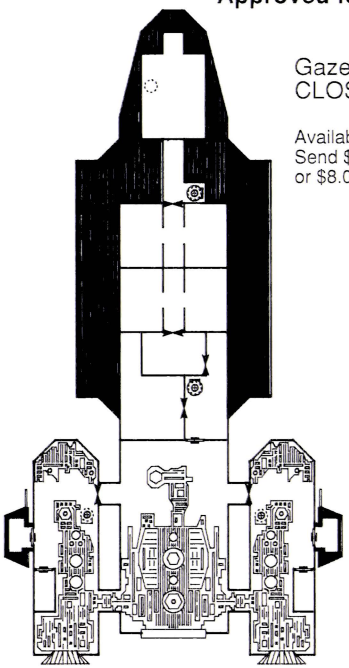
Russ Weyer

Xtor'p!reer

Players' Guide to the NPCs

Approved for Use with *TRAVELLER*®

SEEKER



Gazelle Class
CLOSE ESCORT

Available in 15 or 25mm Scale
Send $6.00 PPD for 15mm
or $8.00 PPD for 25mm

Also for Use with *TRAVELLER*

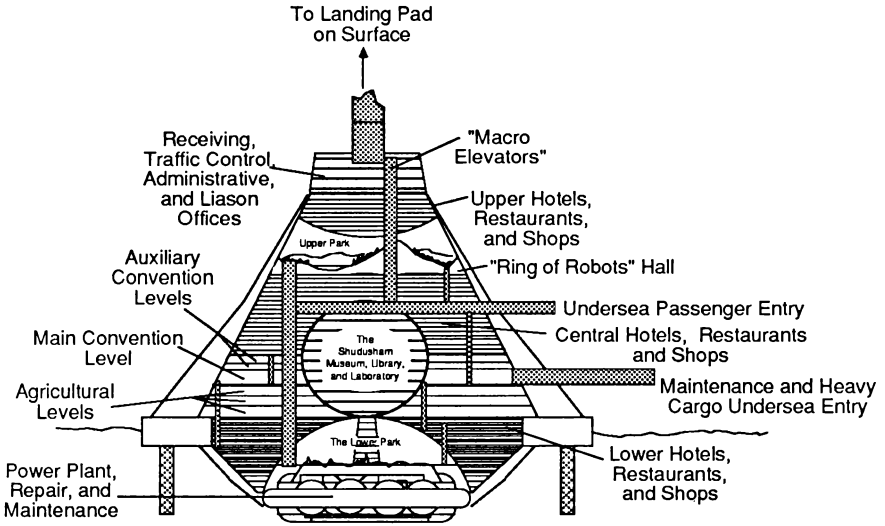
Trading Team — $2.50 PPD
Salvage Mission — $2.50 PPD
Fleetwatch — $2.50 PPD
Flight of the Stag — $2.50 PPD
Escape (New, available in March) — $3.00 PPD

OTHER DECK PLANS BY SEEKER
Merchants Class Ships Volume 1:
15mm — $5.00 PPD 25mm — $10.00 PPD

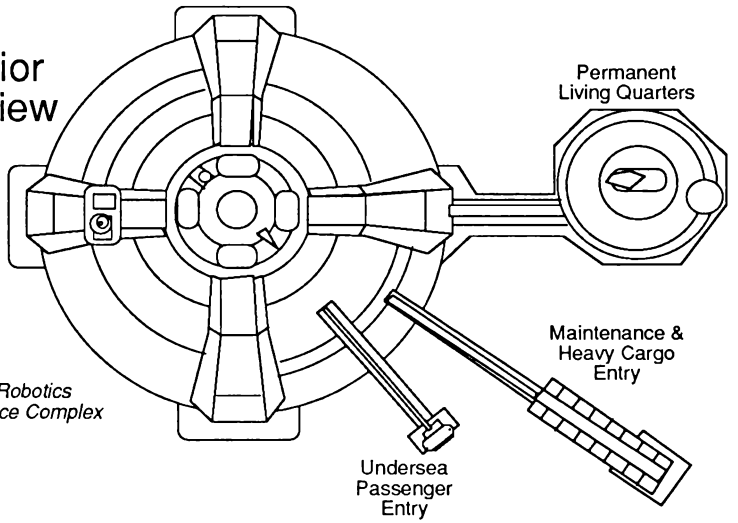
AVAILABLE IN 15mm SCALE ONLY
Module 1: The Corporation — $5.00 PPD
Module 2: Research Facility — $5.00 PPD

SEND TO SEEKER:
P.O. Box 337, Finley ND 58230

Cut-Away Side View



Exterior Top View



—continued from page 27
Four of the Free Scientists, prepared for a firefight, are armed with offworld PGMP-12s and combat armor. Two others carry laser carbines.

When found, the Bruiser floats near the far wall, about 10 meters up. Its control box rests on the floor below it.

A Tricky Task

Controlling the Bruiser is not an easy job, and it is further complicated by other factors that will be revealed below.

Make the players roll uncertain UTPs; with this alien machinery, they can not be sure that they are in fact ordering the Bruiser to do what they want it to do.

After the first roll, a thick black rectangle on the right side of the control box lights up into a holographic display, showing everything visible to the Bruiser. The robot's sensitive sensors examine the people and objects in the room, and label them on the display. All of the displayed information, as well as the controls, are in Hiver.

Aybee can read this display without much difficulty. It shows the humans in the room, with information as to whether or not each is armed; those who are armed are labeled as to weaponry carried. It also shows that Aybee is a "robot, model unknown, armed". Milk this situation for all it's worth: the characters must not let it become generally known that Aybee is a robot!

While the characters are musing over this new information, and fiddling with the controls, the holograph changes. An 8-pointed star appears and centers over Aybee. His image on the holograph flashes red three times before the Bruiser aims one of its FGMP-15s and fires. Aybee's *left* arm is torn from his body amid a flurry of sparks caused by the vaporization of his shoulder. Aybee himself is knocked to the ground by the force of the blow.

Cleaning Up

Functionally, Aybee is not seriously damaged by the loss of his arm. He can continue to function normally, and his laser welder in his right arm is still available as a short-range weapon.

The Bruiser itself turns its attention on the four guards with PGMPs: after several well-placed shots, they are effectively out of the action. (While Aybee may be able to keep functioning after losing his left shoulder and left arm, living humans can't claim to do the same.)

If your players enjoy firefights, let them handle the other two Scientists themselves. Otherwise, the two scientists are apt to take advantage of the nearest exit and escape.

Aybee's left shoulder area can be covered with a coat or something for the time being; the few spatters of melted skin on his neck are not noticeable enough to be a problem yet.

The Shudusham authorities soon arrive and take control of the situation. The

Bruiser fires no more shots unless fired upon, and Epinon can be contacted and brought to the scene.

Aybee's Repairs

Anywhere else, such a disaster for Aybee could be devastating: even the "repair kit" that Krenstein carries with him would be insufficient to fix such damage. On Shudusham, however, it is only an inconvenience. In the advanced robotics laboratories of the complex, one can find or make all the needed materials. Tools are also readily available.

A problem arises, however, to the time factor. The group must arrive at Capital soon to be officially knighted, and Krenstein by himself can not fix Aybee in time.

The Hivers, however, are willing to help, and if this assistance is not requested, they will offer it. The exchange is mutually beneficial: they learn at the side of one of the foremost Imperial roboticists, while he has the best assistants available, knowledgeable and dexterous. Hivers are also less apt to "spill the beans" and reveal to the public at large (and to Emperor Strephon) that Aybee is a robot.

This is an opportune time to add a few extra features to Aybee, such as a small oxygen supply, giving him the ability to function in a vacuum or underwater for about 30 minutes, even without breathing. We will include this feature in future descriptions of Aybee, starting with Adventure 9.

An Alternative Scenario

If you are willing to go to a little more trouble, you can let the K'kree get as far as their ship with the Bruiser. Gaining access to the ship then adds more difficulties to the characters' troubles. One way to solve the problem of boarding is to let the K'kree kidnap Krenstein rather than having the Free Scientists do so. The K'kree would, after all, have the same problems in controlling the Bruiser as any non-Hivers would, and the earlier episode might have given the K'kree knowledge of the fact that Krenstein or Aybee knows Hiver. The Free Scientists could participate in this action or not, at your discretion.

In this case, Aybee could be damaged by fire from the K'kree rather than the Bruiser.

The Actual Key

The Bruiser was always safely under control; unbeknownst to the Free Scientists, Epinon had a second control panel that would override the first. This fact can not be determined and will forever remain a secret.

This secondary panel does explain, however, some of the robot's actions in the warehouse room. It shot Aybee precisely to damage him enough that the Hivers would be asked to assist in repairs.

Epinon also saw to it that the characters were not hurt by the Bruiser or by their kidnappers, by ordering that the Bruiser fire at their guards.

After an investigation by Shudusham and Imperial authorities, Epinon is convicted of various crimes, depending on the events of your game sessions for this adventure. At the least, the Hivers are embarrassed and asked to remove themselves from the conference. At the most, Epinon can be executed for murder. Epinon will not resist this charge if it is laid.

The authorities will not discover that Epinon was the mastermind behind the Society for Free Scientists; in their eyes, they will see only a careless Hiver who brought a dangerous device into the Imperium against Imperial law.

The Long-term Effects

Over the long term, the Bruiser incident will put more pressure on Hiver-Imperial relations. Hiver traders bringing goods into Imperial space will be more carefully inspected. Imperial humans will generally think of Hivers in a lesser light, therefore putting less value on their goods, and thinking less of the race as a whole.

The result of this is that the Hiver Federation grows more slowly, giving its embassies more time to work. Technology will eventually catch up, allowing a homogeneous culture distributed over a larger area, but for now, the expansion of the Hivers will be slightly slowed.

This effect is noticeable only over a long span of time, and should not disrupt your campaign overnight. Manipulations are like pebbles thrown into a pond, with an ever-growing circle of ripples spreading over the surface. Epinon has filed complete details of this escapade with the Manipulations Club on Guaran, with instructions that the record be opened and read in 30 years. Whether he ever returns home or not, he is confident that he has helped his fellow Hivers, and that his lasting place of fame as a manipulator is secure.

Other effects are also evident over the years: relations between the Imperium and the Two Thousand Worlds of the K'kree are strained by their theft of the Bruiser. Earlier animosities between the K'kree and Hiver races are also resuscitated by these events.

Finally, since the Bruiser was brought into Imperial space by a route from the Hive Federation through the Solomani Sphere, there will be a small dissatisfaction on the part of the Imperials toward the Solomani.

Hivers, remember, have a strong parental urge, and this urge finds an outlet in its concern for "lesser" races such as humans. The Hivers are attempting, over the long term, to train up the humans in such a way that they reach "maturity" by Hiver standards. Part of this standard is a disdain for violence.

Since the Solomani are as a rule more violent than the Imperials, a lessening of their intercontact is an added bonus provided by this successful manipulation.

ACADEMY OF ADVENTURE GAMING ARTS & DESIGN
OFFICIAL ORIGINS AWARDS NOMINATION BALLOT

For the year 1986, to be presented at Origins '87, July 2-5, 1987, in Baltimore, MD
(for information about Origins '87, write P O Box 15405, Baltimore, MD 21230)

The Origins Awards, presented at Origins each year, are an international series of awards aimed at recognizing outstanding acheivements in Adventure Gaming. The awards are comprised of the Charles Roberts Awards for boardgaming, and the H. G. Wells Awards for miniatures and role-playing games. An Awards Committee of hobbyists (some professionals, but primarily independents) directs and administers the awards system.

INSTRUCTIONS. Read carefully. Print legibly or type nominations. Ballots that are messy, not completed correctly, or show attempts at ballot stuffing will not be counted. You may list three nominees per category. It does not matter in what order you list them. To keep the voting as meaningful as possible, do not list selections in unfamiliar categories. YOU MUST SIGN THE BALLOT! Include your address. You may vote only once. Nominations should be for products released during the calendar year 1986. Miniatures figure series nominations should be for new product lines or lines which were substantially expanded in 1986.
This ballot may be reproduced and circulated by any means available, provided its contents are faithfully copied.
ALL Adventure Gamers are encouraged to vote!
YOUR VOTE makes a difference! A final ballot is prepared by the committee and voted on by the members of the Academy of Adventure Gaming Arts & Design. Academy membership, $3.00 per year, is open to active, accomplished hobbyists, both professional and amateur. Membership guidelines are available for a SASE from the addresses given below. Correspondence should be mailed to the U S address.
Present members may renew by sending their check with their ballot. Checks should be made payable to GAMA for $3 U S.
The Academy and the Awards Committee as well as the Origins Convention itself, function under the authority of GAMA, the Game Manufacturers Association.

DEADLINE: MAY 2, 1987

THE H. G. WELLS AWARDS FOR OUTSTANDING ACHIEVEMENT IN MINIATURES AND ROLE-PLAYING GAMES

1. Best Historical Figure Series, 1986

2. Best Fantasy/ Science Fiction Figure Series, 1986

3. Best Vehicular/ Accessory Series, 1986

4. Best Miniatures Rules, 1986

5. Best Role-Playing Rules, 1986

6. Best Role-Playing Adventure, 1986

7. Best Role-Playing Supplement, 1986

8. Best Professional Role-Playing Magazine, 1986

9. Best Professional Miniatures Magazine, 1986

10. Best Play-By-Mail Game, 1986

THE CHARLES ROBERTS AWARDS FOR OUTSTANDING ACHIEVEMENT IN BOARDGAMING

11. Best Pre-20th Century Game, 1986

12. Best 20th Century Game, 1986

13. Best Fantasy/Science Fiction Game, 1986

14. Best Professional Boardgame Magazine, 1986

15. Best Military/Strategy Computer Game ,1986

16. Best Fantasy/ Science Fiction Computer Game ,1986

17. Best Screen Graphics in a Computer Game, 1986
(Given a particular computer's limitations)

18. Best Amateur Adventure Gaming Magazine, 1986

19. Best Graphic Presentation, 1986

20. Hall of Fame, 1986

Name_____
Address_____

Signature_____

Send your ballot to only one of the following addresses by the deadline, May 2, 1987.

Awards
GAMA
P O Box 2712
Fairfax, VA 22031

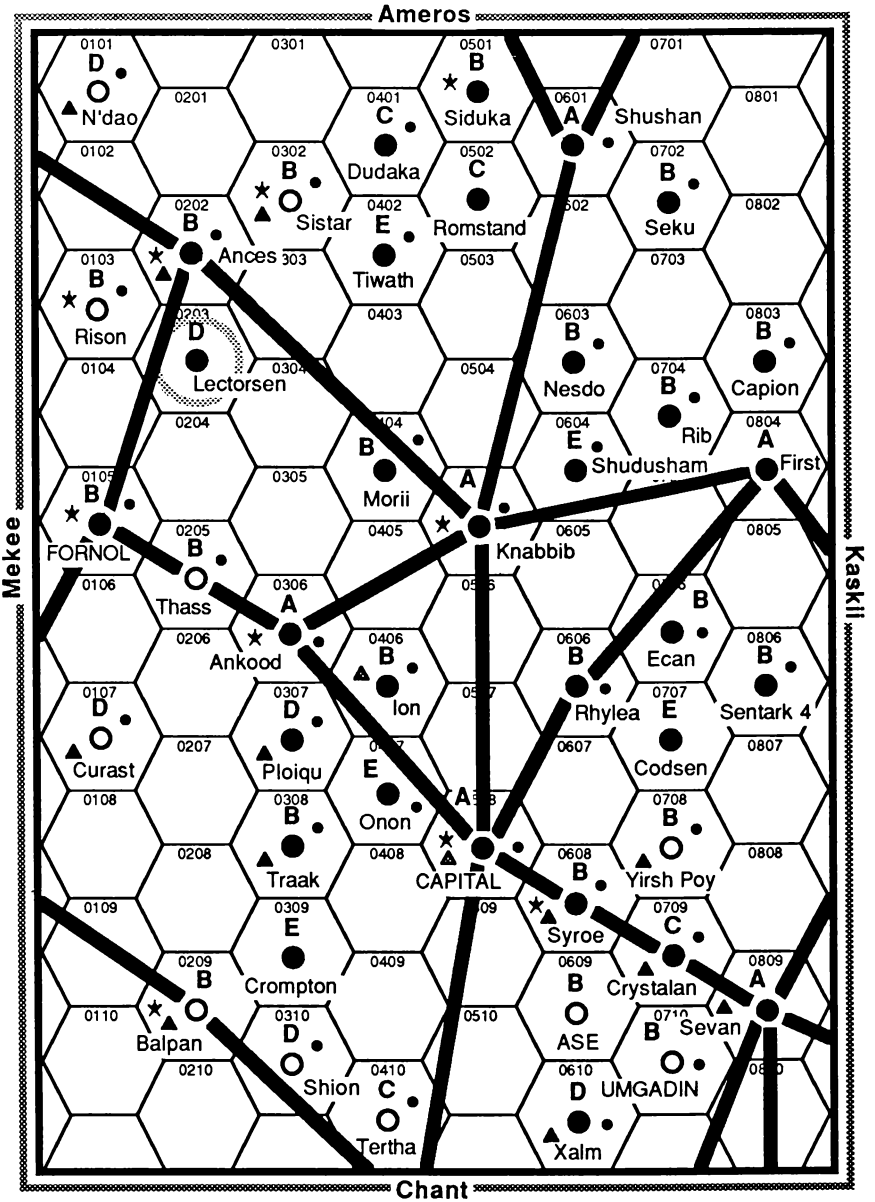
Australia & New Zealand
Awards, Adrian Pett
Breakout Magazine
P O Box 162
Mooroolbark, Vic 3138
Australia

The Core Subsector

The Core subsector (subsector G of the Core Sector) was originally named for Sylea, the old capital world of the Sylean Federation. When Cleon declared the Sylean Federation to be the new *Third Imperium*, Sylea's name became *Capital* and this subsector became *Core*, the center of the new empire.

Name	*Location*	*UPP*	*Bases*	*Remarks*	
N'dao	0101	D1007B8	9 S	NonAg. Vacuum world.	G
Rison	0103	B9D3695	A N	NonInd. Fluid hydrosphere.	G
Fornol	0105	B5819CA	A N		G
Curast	0107	D9B7362	A S	NonInd. Fluid hydrosphere.Owned by Fornol.	G
Ances	0202	B383657	C A	NonInd. Rich.	G
Lectorsen	0203	D354655	5	Agricultural. NonInd.	A
Thass	0205	B510420	9	NonInd.	G
Balpan	0209	B505345	9 A	NonInd. Vacuum world. Ice-capped.	
Sistar	0302	B430551	F A	NonInd. Poor. Desert world.	G
Ankod	0306	A344889	B N		G
Ploiqu	0307	D222747	6 S	NonAg. Poor.	G
Traak	0308	B62488C	A S		G
Crompton	0309	E776002	9	NonInd.	
Shion	0310	D410344	7	NonInd.	G
Dudaka	0401	C544010	6	NonInd.	G
Tiwath	0402	E651575	8	NonInd. Poor.	G
Morii	0404	B62A644	9	NonInd. Water world.	G
Ion	0406	B877655	C W	Agricultural. NonInd.	G
Onon	0407	E576000	9	NonInd. Barren.	G
Tertha	0410	C200342	A	NonInd. Vacuum world.	G
Siduka	0501	B446689	C N	Agricultural. NonInd.	
Romstand	0502	C428567	8	NonInd. Owned by Shushan.	
Knabbib	0505	A331758	F N	NonAg. Poor.	G
Capital	0508	A586A98	A B	Capitol of the Third Imperium.	G
Shushan	0601	A655335	E	NonInd.	G
Nesdo	0603	B541231	6	NonInd. Poor.	G
Shudusham	0604	E849A55	A	Industrial.	G
Rhylea	0606	B8A6530	8	NonInd. Fluid hydrosphere.	G
Syroe	0608	B436854	D A		G
Ase	0609	B22098B	F	NonAg. Industrial. Poor. Desert world.	
Xalm	0610	D4628CA	4 S		G
Seku	0702	B79A557	F	NonInd. Water world.	G
Rib	0704	B559667	B	NonInd. Owned by Seku.	G
Ecan	0706	B444854	9		G
Codsen	0707	E571568	2	NonInd. Military Rule.	
Yirsh Poy	0708	B210577	A S	NonInd.	G
Crystalan	0709	C979788	B S		G
Umgadin	0710	B6B5946	B	Fluid hydrosphere.	G
Capion	0803	B651864	6	Poor.	G
First	0804	AA7A788	9	Water world. Owned by Seku.	
Sentark 4	0806	B755496	7	NonInd.	G
Sevan	0809	A544576	A S	Agricultural. NonInd.	

The Sylea subsector contains 41 worlds with a total population of 72.927 billion. The highest population is 32.6 billion at Capital; the highest tech level is F at Sistar and Knabbib, Ase, Seku, and Capital. All worlds are members of the Imperium.



Core Subsector

Subsector G of the Core Sector

GREEN DRAGON HOBBY

TRAVELLER® BY FASA

ADVENTURES — $3.00

- Ordeal by Eshaar
- Action Aboard
- Rescue on Galatea
- The Harrensa Project
- Uraqyad'n of Seven Pillars
- Legend of the Sky Raiders
- Trail of the Sky Raiders
- Fate of the Sky Raiders

MAGAZINES — $2.00

- Far Traveller Issue #1
- Far Traveller Issue #2
- High Passage Issue #2
- High Passage Issue #3
- High Passage Issue #4
- High Passage Issue #5

BOXED STARSHIP DECK PLANS (15mm) — $5.00

- Adventure Class Volume One (10 ships, 100-800 ton range)
- Adventure Class Volume Two (10 ships, 100-800 ton range)
- Aslan Mercenary Ships (2 battle ships, 3000 ton range)

22" x 34" DOUBLE-SIDED 15mm STARSHIP DECK PLANS — $2.00

- Warlord Quarter Deck — Hero Class Engineering Deck
- Warlord Command Deck — Hero Class Troop Decks
- Warlord Battle Deck — Hero Class Main Deck
- Star Class Merchant Liner — Trader Class Provincial Transport
- Magnadon Class Provincial Merchant — Iris Class Armored Packet
- Seeker Class Armored Merchant — Triad Class Merchant

17" x 22" DOUBLE-SIDED 15mm STARSHIP DECK PLANS — $1.00

- Esphpadir Orbital Installation — Explorer Survey Vessel
- Type "M" Subsidized Liner — Type "Y" Yacht
- Endevour Solomani Patrol Frigate — Type "T" Yacht
- Fanzhienz Class Far Trader — Kurgilash Medical Scout
- Alexandria Free Trader — Stayaow Aslan Combat Scout
- Condor Freedonian System Defense Boat — Zhidts Zhodani Destroyer
- Valor Imperial Missile Corvette — Desiree Keah Private Yacht
- Maru Merchant Vessel — Ninz Zhodani Type "S" Scout
- Lucifer Imperial Destroyer Escort — Chatl Zhodani Leader Scout
- Stedlas Zhodani System Defense Boat — Chameleon Commerce Raider

COUNTER ASSORTMENT — $1.00

Over 400 single-sided counters depicting personnel and starships. Perfect for use with any 15mm grid and any space game.

To order, send check or money order and $1.00 postage to:

Green Dragon Hobby

P.O. 2573, Sandusky, Ohio 44870

Brains, Not Brawn

THE GAMING DIGEST

—by Gary L. Thomas

"OK, you have just arrived on Ameros, and your ship has completed docking. What do you want to do now?"

"Well, we want to look around. Let's head for the main city."

"Uh, I've got some bad news, I'm afraid. Ameros doesn't have much of an atmosphere, and you never mentioned using oxygen masks, so your characters have all suffocated when you walked out of the starport."

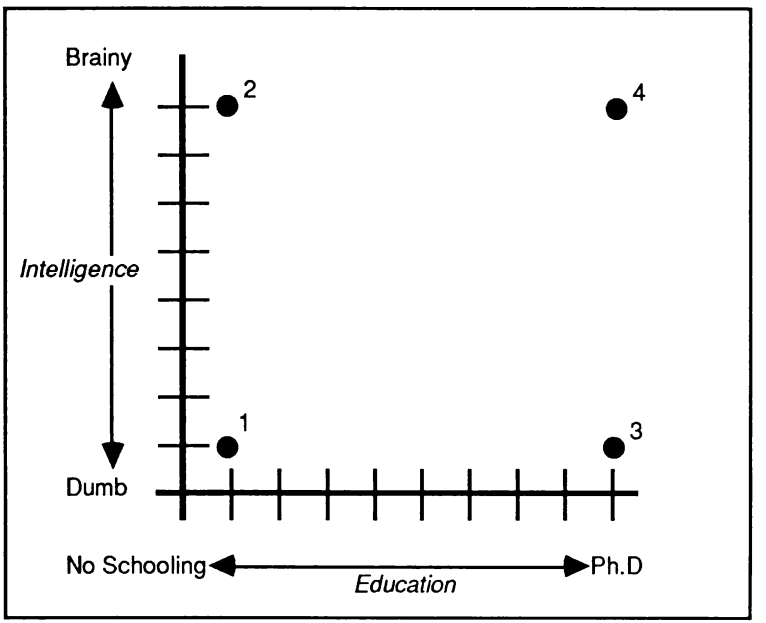
"What? We're smart enough to think of that. You can't just kill the whole party this way. After all..."

This campaign has some obvious problems, not the least of which is the high-handed attitude of the referee. We can't solve that one, but we can provide some guidelines for when characters remember something and when they don't.

This article is part of a continuing series on the characteristics in a UPP. Last issue we discussed social standing. In this issue, we take a closer look at education and intelligence. We will examine the physical attributes next time.

In **Traveller**, education indicates the highest level of schooling attended by the individual. Intelligence corresponds to IQ. But there is more to it than that.

We can think of intelligence and education as being two axes on a grid. The intelligence scale goes from "dumb" to "brainy" and the education scale ranges from "no schooling" to a "Ph.D." Refer to the chart below.



In the lower left corner (point 1) is the "country bumpkin"—the fellow who "ain't had no larnin'" and is unlikely to want any.

In the upper left (point 2) is the character with lots of raw brainpower, but no formal education. This is the stereotypical Vermont farmer, again with no formal schooling but possessing lots of common sense.

The lower right corner (point 3) holds an interesting character type—a person with no brains to speak of but a good deal of education. At their best, these people make excellent players for trivia games. At their worst, these individuals constitute a real menace to society.

At the upper right corner (point 4) is the "Renaissance man"—the person with a wide range of skills and the brains to apply them properly. The best university professors fall into this category, although many unfortunately should be categorized as beloning in the lower right corner.

Most characters (as well as most real people) lie somewhere in the middle of this grid.

Intelligence

What is the range of intelligence? How can we fit the scale of 0 to 15 to the standard IQ scale? One system would use the natural proportions of both scales, matching them up in the obvious way. For example, 2 to 3 percent of people taking IQ tests measure out in the "genius" category—above 140. This match is easy, since two six-sided dice roll 11 or better 2 to 3 percent of the time.

This doesn't work, though, because it does not take into account values above 12. It is difficult to know how often these values occur, because they depend on which tables the player uses to generate his character and even on which service the character belongs to. Mustering out benefits can also give increases in intelligence, further throwing off the calculation.

Low values are another problem. A range of 90 to 110 is considered average intelligence; values below that would have some degree of retardation. But it is unfair to players to suddenly announce at this late date that their favorite character is "learning disabled." Fortunately there is a better way.

IQ scores, historically, were "intelligence quotients", giving a result by dividing a child's mental age by his chronological age (and then multiplying by 100 to give a percent). Thus a 10-year old as smart as most 12-year olds would have an IQ of (12/10)*100 or 120. A 10-year old only as smart as most 8-year olds would have an IQ of (8/10)*100 or 80.

IQs were never meant to measure adult intelligence, but were rather meant as a predictor for learning ability. By giving a child a test, they could predict if he would have trouble in school and thus be ready with the special attention he needed. Today, the definition of IQ has changed. Technically, the IQ is "a measure of intelligence with a mean of 100 and a standard deviation of 16". But what is this "intelligence"?

The cynical answer: intelligence is whatever the test measures. In fact, many psychologists feel this way about the use (and abuse) of IQ tests, so we will throw the baby out with the bathwater for game purposes, and not use IQs to correspond strictly with intelligence characteristics.

We still need a definition: "intelligence is a systematic collection of abilities or functions for processing different kinds of information in various ways." Yes, it's vague, but that's how psychologists talk. Notice particularly that this definition relates in some way to education.

In fact, psychologists recognize three main factors affecting intelligence. The environment of the home and schooling has a 60 percent effect; heredity has a 30 percent effect; and combined effects of the environment and heredity have the remaining 10 percent effect. Does this mesh with the way characteristics are rolled up in **Traveller**?

Intelligence and education are independent rolls, so strictly speaking the game appears to be wrong. But this apparent problem solves itself through one important restriction: as a general rule of thumb, a character may have no more skills (or total of levels of skills) than the sum of his or her intelligence and education. (For example, a character with UPP 77894A would be restricted to a total of 13 combined skills and levels of skills. This restriction does not apply to level-0 skills.)

The effect, then, is that a character with a higher intelligence and education will have more skills than a character with a lower intelligence and education. There are also more subtle ways a connection is established. Most tables which increase one characteristic also increase the other, so a character using that table repeatedly would tend to increase both at a similar rate.

The UTP also naturally takes care of differences in intelligence when intelligence is the characteristic used to determine the DMs. "Smarter" characters get better pluses to their rolls.

Intelligence scores can be quantified in a general way without depending on artificial IQ scores: intelligence characteristic values 10 and above are "genius" levels, values below 5 have some learning difficulties. Individuals with intelligence below 2 can not function alone in society.

On the other hand, if a character with a high intelligence has "left-over" space for skills (only a few skills, but a combined intelligence and education much higher), then the character simply doesn't live up to his full potential. Without an official system for gaining experience, this player must just live with the character as rolled or generate a new one with more satisfactory skills.

Education

Education represents schooling, but this schooling may be more or less formal. Again, the problem is to mesh an independent education roll with the character's prior service record. If the ordinary four-year system for character generation is used, use the following system. Each number above 7 represents

a year in college. Thus an education characteristic of 9 corresponds to a two-year degree; a value of B would represent a college degree, and higher scores would result from post-graduate courses.

Naturally, this is not an exact correlation. A character who joins the marines may never set foot on a campus, but boot camp and special technical training may give him a high education score.

What if the character is known to have attended college (say, because he was generated using a one-year system) but does not have an education characteristic high enough? The solution to this is simple. Just look at the real characters you know who have attended college. My father, for example, studied Latin years ago when he was in school, but since he has forgotten all of it, there is no way that it contributes to his personal education characteristic today.

There is only so much that the mind can hold at once (skills are less than the sum of education and intelligence), so some things once learned are forgotten. Use it or lose it, as the saying goes.

Characters with low education values have had less formal schooling, but this does not necessarily mean that these characters are less useful in an adventure. During a gun battle, does it really matter whether a character knows the capital worlds of all the subsectors in the Spinward Marches? When an air/raft needs repaired, is it important that a character know the history of early Hiver-human interactions?

In sum, a character with a high education characteristic probably has a broader span of knowledge than a character with a lower number.

A Problem

An important problem arises in the course of the game. In any given campaign, it is unlikely that the players' real-life mental characteristics correspond to their characters' education and intelligence values. When these values are wildly divergent, care must be taken to keep the game realistic while playable. Marc Miller refers to this as the "skewing" problem.

Most of the work to solve this problem falls on the back of the referee. He must make sure that the players play their characters properly. He is the final judge in the case of a dispute.

It is quite common for a player not to be as smart or as educated as his character. As a handy example, most **Traveller** players are not geniuses with doctorate degrees, yet someone has to play Dr. Krenstein. In any case, the player is unlikely to be an expert in tech level 15 to 16 robotics technology.

The referee has to see to it that Krenstein's player, or any other player in similar circumstances, is kept posted as to the things he would commonly know. Giving the players this information is not cheating, and it helps the adventure move along much more smoothly. Reminding Krenstein's player that the doctor knows a way to deactivate a holo recorder is no more wrong than it is

to tell Aybee's player the translations of Hiver sentences.

The knowledge may be there, but it is still up to the player to decide whether or not the character exercises that knowledge. The UTP system also helps out by determining whether the character actually succeeds in a task which requires mental energy.

In fact, this is the best way to keep a player in line if he is overzealous with a weaker character. When in doubt, use a UTP roll. This also takes care of the situation of a player who has memorized both volumes of Library Data, A-M and N-Z and then insists that his character (with an education of 6) "would know all that stuff".

A good player will develop a better awareness of his character's restrictions as he becomes more experienced in the game. This awareness is essential if a believable role-playing session is the goal. A good player will not kibitz with other players when the party is separated, and when he plays more than one character in a campaign, he will insure that all of his characters don't draw on one well of knowledge.

Is It Intelligence or Education?

How then should we distinguish intelligence from education for task rolls? Intelligence is raw brainpower, the "smarts", common sense, and quick-wittedness of a character. Education, on the other hand, is the accumulated knowledge gained over the years in formal and informal settings. As a rule of thumb, if a task is highly technical, use education as the crucial characteristic. If the task requires more intuition or memory, use intelligence as the crucial characteristic. Here are a few examples:

To repair major damage to an air/raft:
DIFFICULT, gravitics, edu, 1 hour

To remember to wear oxygen masks in a trace atmosphere:
SIMPLE, int
REFEREE: This is a contrived example, inserted here only to resolve the problem posed at the start of this article. It need not be used unless the players are causing trouble and you are just trying to get back at them.

You might, however, reasonably use the following UTP.

To remember to carry a patch kit in a vacuum environment:
ROUTINE, vacc suit, int

Next issue, "let's get physical" as we delve into the characteristics of strength, dexterity, and endurance. See you then.

THE MYSTERY OF THE MISSING TEXT IN ISSUE #7

Unfortunately, our automated pasteup software has an annoying bug in it that just came to light after issue #7 went to print. Under certain conditions, the software leaves out lines of text!

Below are the missing lines of text, in context with the surrounding text that is in the magazine. The missing segments are underlined. We apologize for any confusion the missing text has caused.

Top of page 23, last 4 lines of the first paragraph should read:

If the object is in or emits an artificial gravity field, the only reading the densitometer will give is "artificial grav field". Beyond planetary range, artificial gravity fields can not be detected by a densitometer (artificial gravity weakens rapidly with increasing range).

Bottom of page 25, bottom of the page should read:

Within each band, the ships are divided into battleline and reserve ships as usual. The side that gets initiative can move their ships; the side that does not have initiative can not move any of their ships.

No ship can move from long range to extreme range unless the player specifies a breakoff by acceleration. Those ships which are not pursued may move to extreme range, at which point the owning player removes the ships from the battle.

Reinforcements coming in from out-system are placed on the playing surface three bands away from any enemy ship (thus at extreme range).

Bottom of page 26, the section Other Sensor Notes should read:

• Incoming meson fire is difficult to detect until it actually hits you unless you have a meson screen. You can detect incoming meson fire when it hits your meson screen if you have neutrino sensors.

• By the same token, you can tell if the incoming missile had a nuclear warhead when it passes through your nuclear damper field if you have neutrino sensors. This is useful if the missle was rendered ineffective by the damper field.

• You can tell the exact agility of any other ship with your sensors.

• A player can specify that a missile battery is firing a probe ordnace instead of HE or nuclear missiles. If the probe ordnance succeeds in getting through all the enemy ship's defenses, treat the rest of the combat step as if the attacker is at visual range for that ship.

• Any ship, at any range, is automatically detected if it uses active EMS sensors.

Library Data of the Core Sector

Apge	Perite	Ameros	Shinkan
Sanches	Mekee	Core	Kaskii
Bunkeria	Cemplas	Chant	Dingtra
Cadion	Ch'naar	Dunea	Saregon

Core: Subsector Key

Ameros/Ameros (2008 B110542-G): About 50 years ago, the famous financial/banking megacorporation Hortalez et Cie, LIC underwrote one of the most ambitious terraforming projects to date in the Imperium on the world of Ameros.

The goal of the pilot project is to completely transform the surface of Ameros from a barren airless rock into a world with a thin atmosphere and a 10% hydrosphere in less than 100 years. If successful, the project will pave the way for comfortable colonization of otherwise inhospitable moons and planets.

The progress on Ameros so far has been disappointing: its atmosphere is only up to a trace level from its original vacuum state and its hydrosphere has been increased to a mere 2%, all of which is currently in the form of ice. Hortalez et Cie has expressed some concern over the discouraging progress; the research team on the world has assured the banking firm that the project is actually closer to being on track than it appears. They contend the last 25% of a terraforming period is when the most dramatic results appear.

Castell/Apge (0410 B7795AF-C): Castell's surface is over 90% water; its ocean floors abound with metal and mineral wealth.

In 758, negligence on the part of the population of the Myteria-Seru undersea arcology caused it to be completely flooded during a seismic disturbance, killing all of the 1.5 million inhabitants. The government decided that to prevent such a disaster from ever occurring again, it must carefully control all facets of life in the arcologies—a philosophy which the present-day government continues to promote.

Codsen/Core (2317 E571568-2): The Imperium owns and operates Codsen, using it to train Imperial Marines in a variety of wilderness settings. The permanent military population maintains near wilderness conditions themselves—making Codsen the ideal world for teaching the techniques of surviving without technology.

Coppelia/Mekee (0919 C550054-B): Coppelia is home to a permanent 8-man orbital research/refueling station, established to study the strange anomalies in the world's gravity field. The world's surface gravity varies at random intervals from .3g to over .7g for no apparent reason. So far, there is no explanation for these gravity fluctuations.

Lectorsen (1813 D354655-5): Lectorsen's carbon dioxide canopy makes it a tropical hothouse teeming with unusual and exotic species. Emperor Martin II, an avowed naturalist, declared Lectorsen an Imperial Garden World in 199, to be preserved with few technological trappings.

Onon/Core (2017 E576000-9): Imperial geologists and astrophysicists are scrutinizing Onon—it is currently in a period of violent geological upheaval.

During the first Imperium, Onon was relatively quiet (geologically speaking), and a band of unsuspecting Vilani colonists settled there. Three hundred years later, Onon's entire crust shifted, causing a massive outbreak of vulcanism around the globe. The colony was utterly wiped out—all that remains are some scant tech level 9 ruins.

The world's geologic history in the centuries since has been unstable at best. Onon has been and still is a favorite research ground for the more daring planetologists.

Sabsee/Apge (0806 A212531-G): The Imperial Naval base on Sabsee has reportedly been conducting research into high-tech personal weapons for decades. Recently, a highly advanced fusion-plasma weapon similiar to the FGMP-15 was unveiled. Dubbed the FGMP-16, the weapon is considerably smaller and lighter than its earlier counterpart, but every bit as lethal.

Tinea-Fabre/Perite (0910 D567125-4): Tinea-Fabre is the semi-private "outback world" of the Duke of Alekvadin (Core 0811 B6759AB-E). The 70 or so constant residents are free to govern themselves as they please between the duke's visits.

Trokusian/Apge (0505 B1306AE-A): Amber Zone. The Grand Marquis Trenz Rugar, the current ruler of Trokusian, is the most recent in a long line of dictators whose word is law on the world. The military police force sees to it that the populace obeys the current ruler's laws to the letter.

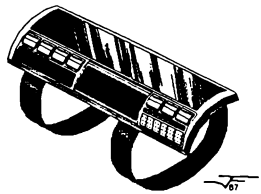
Offworlders may travel through the orbital starport, which Trokusian considers to be extraterritorial. However, Trokusian requires offworlders to purchase an array of permits in order to be allowed to travel to the downport on the world's surface.

Trokusian is a tiny desert world; its 7.5 million inhabitants live mainly in cast ironite dwellings, conditioned and sealed against the harsh conditions on the surface. The world's exports include ironite (a plaster with metal-like properties), and many varieties of natural crystals.

Hand Computers

TRAVELLER TECH BRIEFS

—by Gary L. Thomas



One thing that sets the high-tech life apart from life at lower tech levels is its use of computers to perform many tasks that seem to require real "intelligence". These amazing devices handle data storage and retrieval or data analysis tasks with remarkable speed and reliability. The handheld computer is the pinnacle of these developments, giving anyone a portable assistant that extends his own capabilities.

Handheld Computers and Library Data

In order to understand the role of the handheld computer in Imperial society, it is necessary to understand how library data is created and promulgated. "Library data" is a general term used to describe the information available from a typical ship's computer using its library program.

The Imperium is a vast space, with over 11,000 worlds mapped. The variety of life, cultures, and societies on these many worlds is extensive, and the trading of information is vital to the continuance of the Imperium as a physical entity. If the steady flow of information between worlds were stopped, the Imperium would not survive long.

Technological progress, in fact, is hindered by the vast distances between working scientists. In times past, before man ventured into the stars, scientists researching new developments could trade discoveries with relative ease, notwithstanding differences in language or governmental hindrances.

As the distances between researchers grew, economies of scale were lost, as researchers spent valuable time "discovering" what another researcher had already recently discovered. (This problem is not to be confused with the essential process of repeating some experiments in order to verify results.) In the time it took information to travel from one location to another, an experiment might be needlessly repeated. Even today, with the efficiency of the X-boat system, it can still take several years for results of an experiment to be dispersed throughout the Imperium.

In fact, it is often cheaper to duplicate research than search out and contract for technology elsewhere in the Imperium. But the duplicated efforts of great minds waste some of their capacity.

How does this relate to library data? It is obviously essential for scientific information to travel as quickly as it can. It is just as essential that "ordinary" information travel as rapidly as it can, including news reports, works of fiction in any medium, personal correspondence, and popularized versions of scientific, medical, sociological, and other facts. The difficulty in transmitting this information throughout explored space is exacerbated by the fact that this information does not all come from one physical location.

Thus the library data system came into being. This system parallels the X-boat

system, except that it is privately organized and operated, rather than funded and administered by the Imperium. So far, the private sector has succeeded admirably in fulfilling an important role in Imperial life.

An Example

The simplest way to explain the system would be to look at a typical implementation on a starship, the Singing Wheel. The captain of the Wheel runs his ship around four different worlds in Core sector, carrying passengers and freight to earn a living. One of the services provided for passengers on the Wheel is use of the ship's computer to access library data, both for entertainment and for edification.

Passengers pay no explicit extra fee for this privilege; the costs involved are absorbed in the ticket costs for passage. (The Wheel provides library data terminals only for its high passengers.)

On large worlds that have a sufficiently high tech level, a central repository (usually located near the starport) keeps the "latest" library data. Each time the Wheel stops at one of these worlds, it updates its holocrystals with the latest library data. It pays a regular yearly license for this privilege. (How the library data businesses pay for the information in the library data is discussed below.)

At the same time, this central repository is updating its library data with the information that the Wheel has brought from one of its recent stops. The indexes to the information are organized in such a way that the date of all the information is available to the system. This ensures that any two versions of library data, when combined, produce a new version containing all the latest information, with a new version number. The software that keeps track of these multiple versions is quite complicated, but is provided free to official commercial subscribers to library data.

The entire system is remarkable, in that it depends on the self-interest of its participants to succeed. Those who subscribe to library data are eager to have the latest information, so they interface with another subscriber as often as possible. This subscriber simultaneouly benefits during the exchange from any newer information that the other subscriber may have.

Thus a central repository on a planet keeps the "main" library data, and when a visiting ship arrives, the ship trades its latest information with the repository's latest information. The exchange costs the ship nothing; it is included as part of its commercial subscription fee to the library data.

System Security

Why doesn't the ship, or some other evil party, sneak false information into the library data for its own purposes? There are two main reasons why this is not done.

First, the library data software uses a special system of encryption and checksums to ensure the integrity of its data. Data in a system that did not come from an authorized repository will not be included in a transfer.

Second, the consequences of such an act are devastating to the commercial subscriber. Since the use of version numbers is tied to the information in the system, false information can easily be traced to its source. A subscriber who

willfully foments false information into the library data system will be denied a subscription in the future. Ships and hotels that do not provide this amenity to their customers lose these customers, so they are prevented, again by economic self-interest, from participating in such a stunt.

Does this mean that the library data is always perfect? No more so than the information in any other medium is perfect. Reporters may make errors, and these errors may be promulgated through the system before they are detected. The library data system is meant for mass consumption, so it often repeats common misconceptions.

Information on psionics and the Ancients, for example, is grossly over-simplified. General library data does not reveal that the Imperium still operates a Psionics Institute. It is not common knowledge, either, that the Ancients were Droyne.

Most Imperial citizens are not aware of the diversity of cultures and languages among the Vargr, and library data does not help them much in this respect. The entry on X-boats does not reveal that the Imperium is experimenting with robot pilots for these craft.

Library data in a sense is like a general-purpose encyclopedia combined with current newsmagazines, also including entertainment programs and recent books. Access records for these programs are kept by the software, and again complicated software keeps track of the amounts of the appropriate royalty payments, so that authors eventually receive their due for their labors.

Notice also that the general library data service does not solve the earlier-mentioned problem of the dispersal of scientific data. Special services are available, at a much higher cost, to scientists, universities, and research institutions. Another way to share this information is to meet at various interworld symposia, such as the Shudusham Robotics Conference.

Hand Computers

Hand computers are not commonly held in the hand, although they are of the appropriate size, about 10cm by 4cm by 1.5cm. They are usually worn on an armband on the forearm, for characters with more sedentary occupations, or they are worn on a strap hanging from the neck (see pages 57 and 61 of *The* **Traveller** *Book* for illustrations of hand computers in use). "Ruggedized" field units are available at a slightly larger size, greater weight, and higher cost.

The 500 gram weight of the computer, when worn on the wrist, causes a slight hypertrophy or growth in the muscles of the arm over time, but causes no physical impairment.

Hand computers are available starting at tech level 11, for a cost of Cr1,000.

Two standard optical storage disks can be inserted into the hand computer, giving it an online storage capacity of 40 million words at tech level 11. Beginning at tech level 13, two standard holocrystal vials provide a storage capacity of 400 million words. (As a comparison, 40 million words could contain about 250 encyclopedia-sized volumes. This magazine contains roughly 25,000 words, so a tech level 13 hand computer could store 16,000 issues at once. Unfortunately, since we are on a quarterly publication schedule this would take 4,000 years, so from 1987 to our current Imperial year of 1104 (5626

AD by the Terran calendar) you would still have about 362 years yet to go on your subscription. Hope you have plenty of anagathics.)

Hand computers are equivalent in operational fuctionality to a Model/1 computer, as defined in **Traveller**.

With the proper data available, a hand computer is a powerful tool. But what if this data is not at hand? What value does the computer have then?

Radio Contact

Fortunately, the Imperium-wide commercial library data system recognizes this problem and more than makes up for it. The standard hand computer as described includes a radio tranceiver that links it to a large computer network on whatever world the character is on.

Some of these services are interworld, others operate on only one world, or even in one country on a balkanized world. A character with a hand computer must contract with the appropriate local service to use its data and computer facilities.

The radio network communicates back and forth with the hand computer; software and frequencies make sure that communications are read only by their intended recipients. The main computer can tell, through the subscriber's authorization code, who to bill for the service and how much information the person is authorized to have.

The network is also sensitive enough to be able to locate the hand computer with varying degrees of accuracy according to the tech level of its operation. (Note that some characters may not appreciate this feature; it is consistently used by the library data services, however, because it vastly simplifies their transmissions to the subscribers.) This information is not routinely available to characters: one can not ask the computer where so-and-so is and find out, although the local library data may be able to provide a home or work address, together with an access code for sending electronic mail to the person. (This electronic mail service is described in more detail below.)

When one subscriber wants to meet another subscriber, he can ask the service for the location of the second party. That party is then contacted by the system, and his permission is requested before his location is revealed. If he okays it, the computer tells the first party where the second party is. Since this information is often available to local police even without permission, many unscrupulous characters register their hand computers under phony names.

In any case, the hand computer does not function as a two-way radio between subscribers. The only way for them to communicate is through the central library data service.

Notice also the two ways "subscriber" is used in this article. A subscriber may be a ship or large computer node, exchanging library data on a regular basis. A subscriber can also refer to an individual user, who gets information through his hand computer from a local commercial provider (which is itself a "subscriber" in the first sense of the word).

AAB

One common provider of library data is "the Encyclopedia", more strictly known as the AAB or Argushiigi Admegulasha Bilanidin. (The AAB itself and its museum are located on Vland.) This 7,500-volume set fits on 15 tech level 15 holocrystals. Privately, the encyclopedia can be purchased for Cr15,000, including regular updates, but most users of the Encyclopedia gain access to it through a regular library data subscription, rather than pay the entire private fee themselves for their own copies. Subscribers do not generally copy the entire Encyclopedia onto their own holocrystals from their library data service, because they would be charged for the information gathered, a total much higher than it would cost just to purchase the Encyclopedia outright.

When a character wants information from the library data, there are three basic search methods he can use. The simplest, cheapest, and fastest is the keyword method. He asks his hand computer to look up all the information keyed to "Ancients", for example. The library data computer in this case does not search through its data, but rather looks up the keyword in its index, and then instantly accesses the information corresponding to it. Keyword searches are fast and inexpensive, but they usually return too much information to be of practical use without further summarization. A second keyword can be given to further select portions of the data already gathered, and in fact any number of keywords can be used to control the density of the material gathered.

For example, a character asks, "Please look up the keyword 'ANCIENTS'." The computer responds, "ANCIENTS keyword search results in 800,000 words." Obviously, the character does not want to reference all of this material at once, so he becomes more specific.

"Computer, subsearch that information with the keywords DROYNE and SPINWARD MARCHES SECTOR." The computer responds, "Cross-reference search on keywords ANCIENTS, DROYNE, and SPINWARD MARCHES SECTOR results in 480,000 words."

This is still too much for the character, so he then uses the second most common access method, the summary. "Computer, summarize that information." The computer responds, "Summary of cross-reference search on keywords ANCIENTS, DROYNE, and SPINWARD MARCHES SECTOR results in 4,000 words." This is satisfactory, so the character has the computer read off this information or he downloads it into his own hand computer so he can refer to it at his leisure. Different levels of summary are available, containing more or less detail as desired. Most printed library data entries in various **Traveller** books are summary entries for keywords. If the character wants more detail on certain portions of the summary, he can ask for it.

The cost to the library data subscriber is only for the keyword lookup, which is fast and therefore cheap, the summarization charge, and the access to the resulting information.

A third form of search is the comprehensive search, which is both time-consuming and expensive. Suppose the character has just met a knight named Eneri MacShane, and wants to know more about this interesting individual. His first step should be to try a keyword search. "Computer, search on the keyword ENERI MACSHANE."

Unfortunately, MacShane is not a prominent person, so there is no keyword entry for him. The computer reports this back almost instantly. (In some situations, it may be adequate to know that MacShane is not important enough to have his own entry, and the character might stop here.)

Suppose, though, that the character wants to know more about MacShane. He could then ask for a comprehensive search. The computer would look through its entire database for any references to Eneri MacShane, collecting this information as it goes. Such a comprehensive search might take an entire day, while keyword lookups are almost instantaneous. Naturally, the amount of time for a comprehensive search results in a higher fee for the information.

There is a better way. Since the character knows a little about MacShane already, he can combine a keyword search with the comprehensive search, making use of what he already knows. For example, he might ask, "Computer, perform a comprehensive search for ENERI MACSHANE on information from a keyword lookup of IMPERIAL KNIGHTS and REGINA SUBSECTOR." By narrowing the comprehensive search in this way, the results should be forthcoming much sooner at a lower cost to the character.

It's Never As Good As It Seems

However, there are other limitations to this wealth of library data. The most commonly encountered is the tech level dependence. Radio services for library data of the type described begin at tech level 10, and in such a case all of the computer processing would have to be done by the library data computer itself, or a larger model. Hand computers are not available until tech level 11.

Population is also a factor, because the extensive satellite network is expensive—there must be enough demand for its use. To determine if a world has an extensive global satellite network, roll 2D for the world population digit or less, with a DM of -1 per tech level over 10.

Another restriction can occur as a result of law level or government type. Some rulers are not as interested in the free exchange of knowledge as are others. You as referee must decide these details, but as a general rule, the higher the law level, the less free access there will be to general library data. At some levels, in fact, hand computers themselves will be restricted, as will other media and recording devices.

Other Services for Hand Computers

Naturally, there are other information and services available to a person with a radio hand computer on a world with a high tech level. All the examples given so far concern general library data. For a special fee, a character can tie into more technical library data, which is also available on most worlds with library data services.

For example, a party of characters is having trouble with its air/raft out in the wilderness, and they finally decide to put it down on the ground before they lose control of it. One of the characters has air/raft skill. Can he fix it?

Suppose he has most of the tools he needs, but he has no technical manuals on the air/raft concerned. If his skill is too low, he may not be able to locate the trouble, and even if he can locate the problem, he may not know how to fix it.

A hand computer tied to a technical data base might be able to save his skin. By looking up the specific operational details of the air/raft, he can increase his skill one level. Do not abuse this ability: the character must have air/raft skill (at least air/raft-0) to make any use at all of this increase, and the increase is never more than one level. In any case, it can not increase a level above 4, because library data services do not routinely carry "super-expert" technical information. (Thus a character with air/raft-4 can not enhance his skill level any further using a hand computer.)

This ability is also limited by tech level. If the characters have brought their own tech level 13 air/raft to the world, and they are using a tech level 12 library data service (that is, the world is tech level 12), they will gain no benefit from it. The world would need to be tech level 13 or above before the data would help.

Also, a character with no skill may gain air/raft-0 with the help of the computer.

To gain a temporary skill level-0 using a hand computer and technical data at the appropriate tech level:

FORMIDABLE, int, edu, 1 hour

REFEREE: Success at this task gives a skill level-0 for the next series of UTP rolls on a certain task using the temporary skill. This task is not possible if the skill being sought is non-technical in nature or the world's computer network is not of a sufficient tech level.

Write If You Get Work

There's probably a better way in any case, making use of another feature of the library data service. Since the hand computer (or other access methods to the service) are two-way communciation devices, library data services typically offer "electronic mail". A service keeps a great deal of local information available, including "phone numbers" or other access codes to other subscribers.

A character can thus use his hand computer to send and receive messages on a particular world, almost instantaneously. If the recipient of the message is a subscriber to the library data service, the computer/radio network can page the recipient immediately. If he is not a subscriber, some other means will be used to notify him and deliver the message.

Help, then, is just a quick call away: the character can look up the name of his favorite garage, and call for a high-tech "tow truck" to come to his aid.

A character can even send a message to another world. The library data service will automatically assemble the message for delivery through local X-boat service, or to a starship travelling to a nearby X-boat node. There are additional charges for any of these message services.

Hand Computers at Home

Hand computers can be useful devices during conversations, providing instant access to the answers to questions and disputes. Bar bets can be settled with authority.

Suppose two characters are talking about recent scandals among the nobility, and one is trying to remember when a certain noble was found out. He can just ask his hand computer. "Computer," he asks, "when did the subsector duke

Sagamiru receive his letter of displeasure from the emperor?"

To such a specific inquiry, the computer can provide almost instant answers. In this case, it would translate the request into the appropriate series of keyword and comprehensive searches.

Library data services also typically provide other commercial services besides messaging. These can be very convenient for characters.

Suppose, for example, that some characters want to go on a ski vacation. Making use of the local library data, they can find out slope conditions and costs at various resorts. Travel arrangements and hotel reservations can also be made through the hand computer. The whole trip can be planned and verified in a few minutes using the hand computer. These services are usually paid for by the businesses involved rather than by the user.

Paying the Piper

Fees and more fees have been mentioned, but so far no specifics: just how much does all this cost?

There is no point in simplifying life for the characters (with a nifty hand computer and library data) while complicating things for the players (with a bookkeeping nightmare). It is unnecessary to keep track of every single use made of a library data service. If the characters are on a ship, after all, the cost is included in the price of their high passage tickets.

On a world, a character typically makes some credit arrangement with the service when he first arrives—outlets for this exist in most starports.

At the referee's option, you may decide to ignore these costs entirely. Unless a character is dirt poor, the expenses for typical use are such a small percentage of a character's monthly outgo as to be inconsequential. If the referee does want to keep track, we suggest a fee of Cr20 per month for light use, Cr50 per month for medium use, and Cr100 for heavy use of library data service. Fees for light use can be considered to be included in the average social standing expenditures as detailed in last issue's "Gaming Digest" article.

Extraordinary uses of library data may result in a special charge, at the referee's option.

Get Your Hand Computer Now!

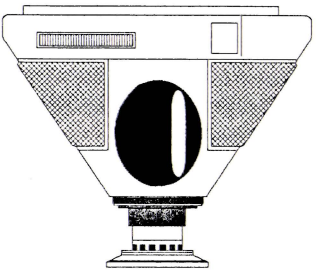
This article has attempted to show referees and players just how life is different at higher tech levels, and how one particular appliance plays a part in this difference. We hope that characters who have gone through life without hand computers can see some previously unknown reasons for owning one. Now, if there were only more tech 11+ worlds...

Beyond 101 Robots

Our recent book, *101 Robots,* contains designs for more than one hundred Imperial and alien robots, as well as some new rules, skills, and devices for use with robots. But among the 11,000 worlds of the Imperium, there are many robots besides those described. Here are five new Naasirka robots that might be encountered in Imperial space.

102. SHIP'S BOAT PILOT ROBOT

21xx0-00-LM001-1413 Cr25,700 13kg
Fuel=(external power)
Duration=(unlimited) TL=12
4/10 (mesh)
2 Eyes
Power interface, brain interface
Slave unit
Ship's Boat-4

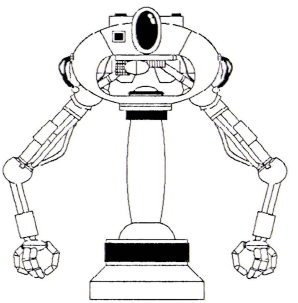


This ship's boat pilot, the Naasirka "Captain Livanur", plugs directly into the bridge controls, drawing power and sensor data from the ship and giving commands to it without sentient interference. It does have two eyes for three-dimensional visual confirmation of the ship's sensory data, but most of the time the ship is flying on "instruments" rather than looking out the window. Models similar to this one are sold by a number of other manufacturers besides Naasirka.

The use of these robots varies widely, depending upon a world's laws concerning small craft. On some worlds, particularly in the Solomani Rim area, robots can assist a human pilot but can not fly the craft alone. On other more crowded worlds, it is a crime not to fly "automatic" in populated areas.

103. CLERK ROBOT

30xx0-02-LM222-CB53 Cr182,700 27kg
Fuel=(external power)
Duration=(unlimited) TL=13
10/25 (mesh)
2 Lt arms
1 Eye, 1 ear, voder
Power interface, brain interface,
program interface
Video display (2D)
Admin-1
Emotion Simulation



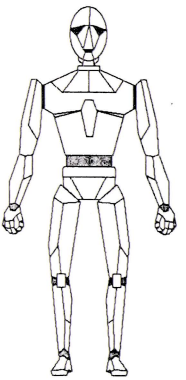
The Naasirka 4K10 Deskbot is similar in configuration to most other deskbots, but it claims a place in history because of the Laynor scandal. In 952, authorities indicted 12 Naasirka officials from the megacorporation's manufacturing plant on Laynor, claiming that income and expenses had been fraudulently reported to evade excise taxes.

Investigation showed that the software operating in more than six hundred 4K10 Deskbots was specifically written to falsify records. Naasirka claimed that the software had been sabotaged by a competitor, but the Laynor government held that Naasirka was responsible for any reports submitted to it. Improper software was never found in any other 4K10 Deskbots other than those installed at the Naasirka plant.

Amid embarrassing publicity, Naasirka settled out of court. The 4K10 model was discontinued the following year.

104. SERVANT ROBOT

551x2-A2-LC114-FC51 Cr77,000 110kg
Fuel=73.5 Duration=20.4 TL=15
22/55 (mesh)
2 Lt arms
Head (10%)
Basic sensor pkg, voder
Janitorial tool pkg
Steward-1, General Vehicle-1, Valet-1
Emotion Simulation

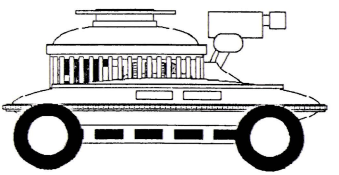


This utility robot is manufactured by Naasirka, but is marketed under other brand names to prevent direct competition with its own Rashush line. This robot can perform simple household servant duties, but it is not as robust mentally as the higher-priced Rashush models.

The servant is attractive both to single people and to families. It can be purchased outright (typical life is 40 years) or leased for Cr4,000 per year including maintenance.

105. SECURITY ROBOT

500xA-00-5B001-5201 Cr7,900 50kg
Fuel=54.5 Duration=22.7 TL=12
20/50 (mesh)
1 Eye, 1 ear
Security-1



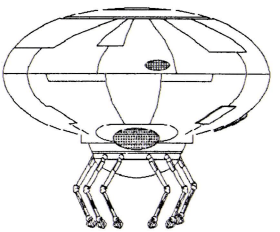
One of the cheapest robots available, the Naasirka SR5 is marketed as a security robot. It can motor around on its wheels, inspecting offices or construction sites for unusual sights or sounds. When something is detected,

the robot goes to a wall- or floor-mounted control panel and signals for sentient assistance.

Some owners prefer this system to a more automated one, believing that too much reliance placed on multi-surveillance systems, where one sentient must keep track of view screens from several camera mounts, leads to operator error and resulting loss. A fully-automated security system would be too expensive, however. (For example, a single ICAM Technology AN-427 maximum security robot costs almost Cr300,000.) Using several inexpensive SR5 robots with a sentient guard strikes a happy medium between these two extremes.

106. TERRAFORMING ROBOT

C46xD-06-ML101-XF32 Cr202,800 2,150kg
Fuel=577.5 Duration=101.8
TL=12 Thrust=9,000kg
400/1000 (combat armor)
6 Hvy arms
Basic sensor pkg (eyes: +1 tele, +1 pass IR), radiation sensors
Master unit, slave unit
Radio (continental range)
Terraforming-4, Grav Vehicle-1



A team of these robots is almost essential for any large-scale terraforming project. Fortunately, advances in robotics make these models possible at about the same time that advances in terraforming make them necessary. This version, the Naasirka Poni, is strong enough to perform heavy earthwork, cutting, transporting, and filling as necessary. Special attachments for the robot's six arms make these tasks easier. The robot's brain and programming give it the precise knowledge it needs to perform the required changes to the land environment.

The Poni's "combat armor" is not meant to protect it from battle conditions, but rather consists of special materials affixed to the hull that strengthen the robot—like a construction worker's hardhat.

The master/slave configuration of these robots allow them to work together, and large projects might use thousands of robots over hundreds of years, turning a desert into a garden.

Back Issues!

The Travellers' Digest ***$3.95 each***

Adventure Number 4, "The Gold of Zurrian"...
- A Mystery in Jump Space
- Complete 11"x17" foldout plans of Tukera Longliner Starship
- Law Enforcer Character Type
- Special Tech Briefs: High Tech Forensic Science
- Library Data, Subsector Map, and more!

Limited Supply

Adventure Number 5, "The Humaniti Experiment"...
- An Old Starship Holds Records of a Bizarre Experiment on Humaniti
- Grand Survey Data on the world of Vland
- The First Imperium, by Marc Miller
- Index to Worlds in issues 1—4 of The Travellers' Digest
- Library Data, Subsector Map, and more!

Limited Supply

Adventure Number 6, "The Most Valuable Prey"...
- Why Do Some Hunting Parties Disappear Without a Trace on Kaiid?
- Persons and Unpersons, Standards Used by the Scouts in Alien Contact
- The Referee's Guide to Using Tasks
- Grav Belts: Special Expanded Tech Briefs
- Library Data, Subsector Map, and more!

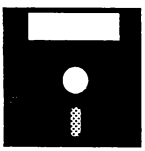
Adventure Number 7, "The Fourth Imperium"...
- Are Changes In The Works? Find Out In This Issue!
- Special Starship Issue!
- Incorporating Sensors Into High Guard Combat
- Starships In Mothballs
- Computer Software for High Guard
- The Future of Traveller: An Interview With Marc W. Miller
- Library Data, Subsector Map, and more!

$3.95 each. Please include $1 per order for P&H. MC & VISA accepted.
Order from Digest Group Publications, 8979 Mandan Ct., Boise ID 83709
Telephone: (208) 362-3094

Computer Software For TRAVELLER®

Disk 1: WordGen/Bestiary

Apple Macintosh Format



NEW! Also IBM PC format too!

$18.50 each plus 1.50 P&H

DIGEST GROUP PUBLICATIONS
8979 Mandan Ct
Boise, ID 83709

Coming in the Next Issue...

- **Before the Iridium Throne**
  Is it worth the risk to have friends in high places? Someone is trying to fool Emperor Strephon, and the Emperor is *not* pleased...
- **Plans of the Imperial Palace**
- **Crack Troops: The Emperor's Guard**
- **An Interview with Emperor Strephon**
- **Noblesse Oblige: Imperial Nobility**
- **Extensive Details of Capital**
- **Special Library Data by Dale Kemper**
- **New Column: Traveller Q&A**
- **Gaming Digest: Let's Get Physical**
- **Debut of our new TRAVELLER:2300 Section**
- **Tech Briefs**

...and much much more!

Available in June!

New! Full-Size Format! Expanded Coverage of Traveller!

Digest Group Publications